

ZONE VI Newsletter

NEWSLETTER 8.73.1

Dear Reader,

This is the first Zone VI Newsletter. It is with a feeling of pride and responsibility, warmth and appreciation for your interest that I begin what I hope will be a mutually enriching communication.

We who photograph seriously share an interest in the most exciting, expressive visual medium of our times.

Photography has had a short history but we have already seen great accomplishments. Many of its early greats are gone - Hill Adamson, Curtis, Stieglitz, Steichen and Weston. But Adams, Caponigro, Strand, Gagliani, Smith and others continue the search in the great tradition.

A distressing number of photographers in recent times have resorted to gadgetry and tricks of process as a quick route to recognition, however. Photographers today are strongly influenced by the salesmen of the tools of our trade. A magazine ad shouts "Open the door to your creative potential with the Rising Sun Electronic Zoom Repeater. Over two hundred accessories fill your every need for self-expression". A technical editor praises an enlarger with which he made 50 "Excellent" prints in two hours. The inference is subtle, persuasive. The reader is led to believe that the machine alone will solve the problems and

Putney, Vt. 05346

create the expressive results. Many are lulled into believing that if just the right trick is known, success will be assured.

I doubt that you are fooled by such salesmanship. Calls and letters indicate that my readers form an atypical group of photographers who are not interested in tricky gimmicks that may win a contest or a few pages in a tasteless "annual".

In each issue I will present and respond to some technical questions that you raise. Photographers will have the opportunity to speak their minds on any subject of concern without regard to advertisers' pressures or editorial control. There will be but one restriction imposed. The contributor must be a producing photographer.

I hope that each of you will feel that this is your Newsletter, and that you will want to forward your question, thoughts, and criticisms.

The Newsletter should be used not only as a means of communicating with me but as a means of reaching photographers with similar interests or problems. You may use these pages to advertise equipment you would like to sell or buy or perhaps just to locate kindred souls in your area that you might like to be in touch with.

So, with your support, I will depart from the policy of a more structured periodical in order to advance an approach, a philosophy that I hope will be a refreshing change from the full color million circulation monthlies. I am interested in your reaction.

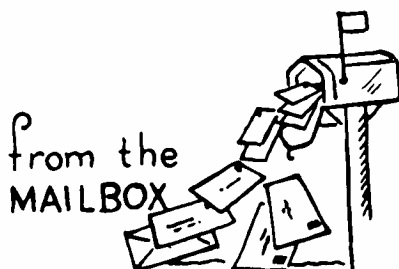
PRINTING WITH PAUL CAPONIGRO

Not long ago, I went to Bethel, Connecticut to assist my friend Paul Caponigro in the production of his superb "Portfolio II" consisting of 100 sets containing eight prints. As of this writing, 82 have been sold but 18 are still available. (brochure enclosed.)

We began the printing with a lovely photograph of stones on a beach. It was a beautiful negative and seemed to present no problems. My guess is that more than a dozen test strips were made utilizing different combinations of paper, developer, dilutions of developers, development times, and developer additives such as glycin, B.B. solution, etc. Finally straight unmanipulated prints were made - about 15 or 20. These were toned for various times in different dilutions, washed and dried. Each print's formula had been listed on the back. Of these Paul chose the single print that had the feeling, the atmosphere that he wanted to convey. The print "lived". Two and one-half days of hard work lay behind us ---- but we had the "formula". Necessary dodging and burning procedures were minimal and quickly worked out and 150 exquisite prints were then produced.

The point is simple. It didn't take two and one-half days to make one print because the photographer didn't know what he was doing. It took two and one-half days because the photographer knew exactly what he was doing and was tirelessly determined to repeat the statement as clearly and beautifully as its original appearance in his mind's eye.

LETTER TO
THE EDITOR



The Zone VI Workshop Manual is only a half year old, but it seems to be a vigorous baby. Sales have been far beyond expectation and much friendly mail has been received. In this column I will answer some individual letters as well as groups of letters asking questions in the same general areas.

The cold light enlarger heads evoke great interest and sales have outstripped production for three months. We're caught up now and have the luxury of inventory. To you who have waited, please accept our appreciation for your patience.

Dear Mr. Picker:

I am delighted with the "Zone VI Workshop" just received. I will profit by it a great deal. I will appreciate your answering a question relative to enlarging. I am using a "Super Pro" and am about to buy a Beseler 23C. I am interested in your thinking in regard to not using a condenser enlarger, instead you advise a cold light head. I do some color work, and would like to know if the Beseler colorhead DGA with its diffused light would be suitable instead of the cold light head? If the cold light head is to be preferred for black and white, that is what I will

want.

Attached is an order, with check. I will await your reply with interest.

Very truly yours,

Alban Papineau, M. D.
Plymouth, North Carolina

Dear Dr. Papineau,

The DGA will only partially solve the problem of the Callier effect because:

1. The light source is too far from the negative and the light will "beam". We have discovered that even with our cold light heads, the high value blocking effect of condensers can be induced by raising the cold light away from the negative. This is physically possible with enlargers like the 23C which have an upper bellow. The light source must be close to the negative - less than one inch - to achieve the true contact print effect. The light is cold, so there is no danger of buckling or damage to the negative.
2. The DGA light is not nearly as smooth in intensity over the negative area as the cold light. (This can be checked with a light meter).
3. The cold light head results are far superior for color prints as well as for black and white prints. The reason for the superior result is that the Callier effect has to do with negative densities, not with negative color, and therefore, the Callier effect produced

by condensers or poor light placement is even more troublesome with color negatives because of their shorter range and denser high values.

I am confident Doctor, that you will find the above statements completely accurate. Avail yourself of our standard offer. Order a cold light, use it for a month, return it for any reason (or no reason) for a full refund if you wish. Thank you for your interest. Incidentally I think the Beseler 23C is the best small enlarger on the market.

With best regards,

Fred Picker

A few letters have arrived with questions relative to placement of filters with the cold light unit. (The unit rests close above the negative, rendering enlarger filter drawers unuseable). Several methods are available to provide placement of variable contrast or color filters.

1. Filter gels are preferred to the plastic filters. They are thinner and no distortion can be seen in the prints regardless of where they are placed. They are inexpensive and can be replaced singly in case of damage.
2. Gels can be simply laid on the negative carrier. They are available in two to twelve inch squares.
3. A two inch square can be laid directly on top of the enlarging lens.

4. Caponigro lays the filter on the swinging arm that holds the red plastic filter below the lens. Punch out the red filter of course. Never knew what those things were good for anyway!

David Miller of Rutgers University writes:

Dear Mr. Picker:

I have certainly found your workshop manual extremely helpful and interesting, especially because you briefly and clearly present procedures and criticize ideas and products frankly. I've been revising my approach to darkroom work following your suggestions and have had great success in improving the quality of my prints already.

I am planning to buy a small press or view camera in the near future and thought you might have some good advice to spare on the subject. I want to stay at 2-1/4 x 3-1/4 size since I don't want to change my Besler 23C at this time. The old Century Graphic press camera looks attractive in price, but the movements are rather limited, it seems. I have never seen the Plaubel view in this size although it does seem a bit dear as advertised. I'm sure the best choice would be a Linhof, but I can't afford it at the high prices. My current subjects include buildings and architectural details, and some nature and landscape work.

I'd appreciate help in avoiding any pitfalls obvious to you in moving to this slightly lar-

ger format.

Sincerely,
David H. Miller

Dear Mr. Miller:

I am glad you found the book helpful. I would strongly advise against any camera with movements and ground glass focusing unless it is 4 x 5 or larger. One reason is that the small ground glass is extremely difficult to compare or focus on. When you swing or tilt you can't see what's happening without a magnifier and the glass is so small that when you get your hand and a magnifier in there, you've covered the glass. The sheet film is very small and difficult to handle in a tray, the roll film backs are very cumbersome, but the Calumets is the best. If you buy this size, I think you will learn a lot more words quickly! I would strongly suggest two possible alternatives.

1. A used 8 x 10 - make contact prints. This will give you the best possible print quality at the lowest price.
2. A used or new Calumet, Graphic View, etc. 4 x 5. This would necessitate a 4 x 5 enlarger with lens, negative holder, etc. and therefore cost more, but you would not be limited to 8 x 10 prints.

It seems we all make the same mistake. "Sneaking up" at wasteful cost to the equipment we should have bought in the first place. I'm guilty too, and the information above was gathered at my expense!

Sincerely
Fred Fisher

ZONE VI Newsletter

NEWSLETTER 11.73.2

In the "Zone VI Workshop" section that is addressed to film development time, the only criteria mentioned is what we know as "normal" development. That "normal" development time will render a Zone VIII exposure as a Zone VIII print value when the enlarging exposure is the minimum that will print black through the clear film (film edge).

The total Zone System embodies a refinement that was purposely not included in my text. That refinement is variable development time for increase or reduction of the contrast of the scene photographed. There are several reasons why it was left out including:

1. Many people give it an importance out of proportion to its value not realizing that it is an emergency measure.
2. Photographers using 35mm or 120 roll film seldom expose an entire roll under conditions favorable to either plus or minus development and are reluctant to change rolls, waste a part of a roll, etc.
3. Small film reacts in increased grain to long development, low values are usually compacted by short development and although I occasionally employ variable development in very extreme situations with roll film, my experience is that changing paper grades and print developers produces the desired print contrast in almost every case.

Nevertheless, so many letters have been received regarding the omission that there must be more interest or importance than I envisioned, so here goes.

A development time for a "plus" (normal plus one) is ascertained as follows: Expose a roll of film to Zone VII, cut it into three parts and develop one part for 40% longer than your normal. Place one of the negatives in the enlarger and expose for minimum time for black through the film edge. If your Zone VII negative prints as a Zone VIII, you have your normal plus one (one Zone) time. (See "development time" section in "Zone VI Workshop" for determining Zone VIII print value). If the print is too light showing no tone, decrease development time to 25% more than normal and develop the second strip of film and retest as above; if too dark a value, increase to 60% more than normal, etc

To locate your minus development time, expose a roll to Zone IX and develop one third of the roll 25% less than normal, then print for Zone VIII as above. Neither of these tests can be done unless personal film speed has been positively identified.

Plus 2, minus 2 developments are also possible and the procedure is the same except that exposures are placed two Zones above or below Zone VIII and then developed to Zone VIII density. Times, of course, will be greater for plus 2 than for plus one - about twice normal - and less than minus one - about $\frac{1}{2}$ normal. With small film the grain problem will be great when contrast is expanded by long development. For short development times which may be insufficient for efficient agitation, the developer may be diluted so that workable times can be used. H.C. 110 at 1-45 for five minutes gives me and N-1.

Some situations when development other than normal might be required: The shaded side of a dark barn

in the foreground, a sun-lit snow field in the background. The barn should show texture, but if you place it on Zone III, the absolute minimum textural placement, the snow field falls on Zone IX and will be blocked in the negative. Normal minus one development will reduce the Zone IX density to Zone VIII and the negative can then be printed on normal paper. Unfortunately, the low values are affected also, but only slightly. The Zone III barn will lose a bit of density and will probably print about a Zone $2 \frac{3}{4}$. That may seem inconsequential, but the lower values have poor separation at best and the smallest loss of density in values below Zone IV can be ill afforded.

Plus one or two development is called an expansion. The density range of the negative is expanded to reproduce a greater range (more contrast) than the scene contained. A rock face all in direct sun (no shadows) or all in shade might appear quite brilliant to the eye. The different shades of gray seem to be well separated, but the meter shows very little difference - perhaps three Zones between the darkest and lightest gray. The print will be dull. If you place the darkest stone on III, the lightest will fall on VI and a plus one will expand it to almost VII. Printing on #3 paper will increase the high value to a print value of Zone VIII. What would happen if you gave the negative normal development and printed it on #4 contrast paper? Would the print look like the other? The only way to finalize the question to your own satisfaction is to try both ways under controlled conditions and compare the prints. I have performed this test literally dozens of times and find that no describable difference can be seen between the prints. I am satisfied therefore that expansions can be handled with paper grade changes.

Contractions - minus developments are a different matter. A reflectance falling on Zone IX or higher is hopelessly blocked in the negative and a soft paper won't help. Printing down or burning in the high value will give a textureless grainy gray at best. For these extreme situations, the only answers are reduced negative development, which somewhat reduces shadow densities, or reduced exposure which also reduces shadow densities.

Doubtless, much mail will arrive pointing out the shadow holding highlight reducing compensating marvelous developers. Like D-23 two solution, Amidol and waterbath, very diluted everything, etc. But I've tried them all and found that they (or normal but shorted development) work beautifully in reducing the high values. They also turn the low values into mush. If you have a formula that works, I'd like to know about it, but please don't describe it - send prints!

TRADING POST

Please send descriptions of equipment you would like to buy, sell or trade. We will list it in the next Newsletter at no charge.

I WANT TO BUY:

150mm. lens for a Hasselblad 500C
Lillian Farber
One Cross Hill Road
Hartsdale, New York 10530

(continued)

Standard lens for a Hasselblad 500C
Tom Truxes
c/o Zone VI Studios

8x10 back and bellows for Sinar
Standard View. Also lens, holders.
John Quinlan
128 Goodwin Terrace
Westwood, New Jersey 07675

I WANT TO SELL:

A Pentax 6x7 with standard and
200mm. lens - \$750. (or swap -
see above). Like new.
John Quinlan
128 Goodwin Terrace
Westwood, New Jersey 07675

An Arkay stainless rotary print
washer. Excellent condition. \$80.
Carol Kemelgor
294 Chatterton Parkway
Hartsdale, New York 10530

A 200mm. Nikor lens for Nikon -
used twice. \$175.
Carol Kemelgor
294 Chatterton Parkway
Hartsdale, New York 10530

Bes 4x5 CRMX w/ voltage control
Codelight Head, no lenses. \$895.
(changing to a 5x7)
Jack Goodman
416 Roaring Brook Road
Chappaqua, New York 10514

NEWS ITEM: The book, Rapa Nui, Easter Island, is at the binders and copies will be ready to mail about December 15th. The book is 9x11, clothbound, 144 pages including 80 of my photographs, text and a special historical summary by Dr. Thor Heyerdahl. He is the famous Norwegian Archeologist who spent over a year exploring that incredible place and wrote the exciting books Kon Tiki and Aku Aku.

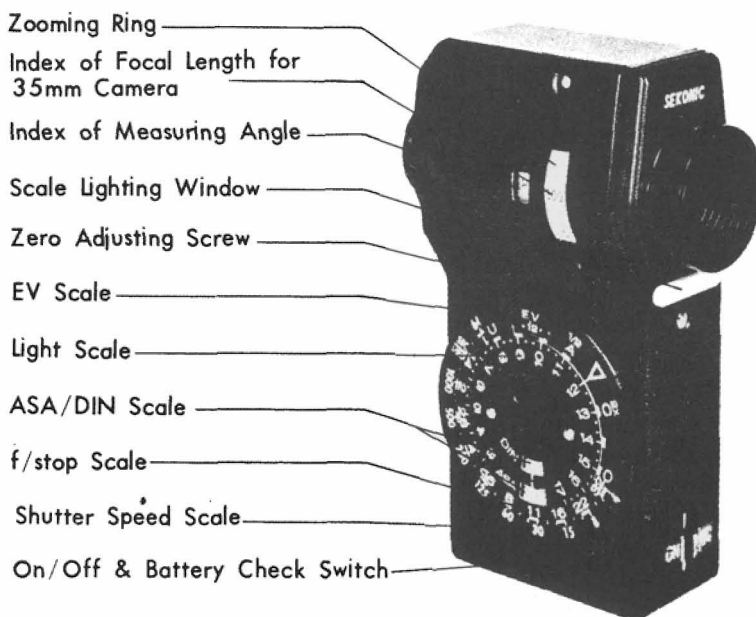
The book is really a work of printers art. Scroll Press in Danbury beautifully reproduced the 300 line off-set negatives prepared by Thomas Watkins on Warrens Lustro Offset Enamel which we believe is the finest printing sheet available.

The book will be sold in the bookstores (and by Zone VI) for \$14.95, but Newsletter subscribers may have their copy for \$11.95. I will be pleased to autograph it to you personally (please indicate whether to Ed, Ed Barnes, Edward G. Barnes, etc.). We will include a separate supplement which will not be available with bookstore copies. The supplement is entitled, "About the Photographs" and describes the photographic approach, equipment, and techniques that were utilized.

WORKSHOP: I have scheduled a workshop next July at the University of Vermont at Burlington. The workshop will be limited to 12 students and four openings are still available. Tuition is \$90. for Vermonters, somewhat higher (not sure yet), for out of Staters, and the precise dates have not been finalized. The workshop will carry three credits, but you need not be a student to attend. If you are interested, please drop me a note and I will keep you informed as arrangements become finalized.

We are adding a fine meter to our catalogue. It is a 10° spot reader, the size of a Weston 9 and has an excellent viewfinder. The meter is made by Sekonic and sells for the same price as the discontinued Weston 9 - \$85.00 including shipping, battery, carrying case and custom Zone Dial are included. Very fast handling, easy to use and I check each one against a photometer before shipment. The catalogue designation is SEK 10° . The 10° coverage is equal to that of a 200mm. lens on a .35mm. camera. If you have been considering the Soligor 1° at the new price of \$114.95, they have become almost impossible to find and this meter would be a fine substitute at a substantial savings.

COMPONENTS



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Christmas and a New
year are practically
here. I wish you all
good things - health
and happiness for you
and your family and
beautiful pictures
during the holiday
season and the coming
year.

*Sincerely
Fred Fisher*

ZONE VI Newsletter

NEWSLETTER 4.74.3

We have received quite a lot of correspondence relating to the resin coated papers. The advantages of this material are said to be fast fixing, washing, and drying. In addition, a ferrotype quality surface is obtainable without actually ferrotyping and the prints dry flat and without shrinkage. In our tests all these things do happen, but only if some very rigid guidelines are observed. With one exception, everything works as with normal paper processing until you reach the fixer.* Since the fixing time cannot be longer than a timed two minutes, constant agitation is required. Only time will tell if a print fixed so briefly will have a long life, but two minutes seems very scant. The washing apparatus used for R.C. paper is most important. You cannot use a conventional holding tray because the water which contains a slight trace of fixer will penetrate the cut edges of the paper and no amount of washing will remove it. The two minute fixing time, they say, does not give the fixer sufficient time to penetrate the edges. Shaving off the resin coating and applying HT-2 near the edge tells a different story.

* These papers stick together in the developer so prints must be developed one at a time unless large trays are used.

147 Hillair Circle, White Plains, N.Y. 10605

Anyway, a drum washer is not good as the water exchange rate is too slow. Probably best is a quick change wash tray like our Arkay Stainless.

Drying is faster than with normal papers and presents no problems if carried out on screens, but the resin melts at about 230° so most heated drums are out. At 200° the paper will glue itself to the drum.

Dry mounting is a real problem. The resin is smooth and normal adhesives won't work. In addition, the waterproofing traps moisture which often leaves bubbles. The press temperature must be no more than 185° as the emulsion will lift off. A dry mount tissue that will bond at 185° is made by Ademco and distributed by EPO, 623 Stewart Avenue, Garden City, L.I., New York 11530.

The inconveniences of precisely timed fixing, agitation in the fixer, one by one washing and the nervousness relating to the fixer sneaking into the edges is somewhat balanced by the fast flat drying for those in a hurry.

Conclusion: The most practical way to handle this material might be to process it exactly like any other paper realizing that contamination is occurring through the cut edges. When making the print, a ½ inch trim could be envisioned and after drying, the contaminated edges would be trimmed off. The result would be a 7x9 borderless print on 8x10 paper.

The character of the paper is not particularly to my liking as it appears rather flat and weak, but this is, of course, a matter of individual taste.

Other questions regarding papers and developers refer to various additives for contrast adjustment. Increased contrast is obtainable from any developer by the addition of bromide, which retards the development of the higher values, and/or hydroquinone which adds overall snap. An easy way to proceed is to make up quarts of 10% solutions of these and add one ounce of one or the other or both to each quart of working developer. One ounce per quart is about the minimum that will produce an appreciable effect. Another ounce per quart can be added for greater contrast if necessary.

For reducing contrast, softer developers can be used. GAF Ardol, for example, is softer than Dektol and prints developed in it will show more luminous low values. (Dektol is stronger and has a tendency to "dump" delicate low values into black). Ardol also provides an attractive warm print color - brown rather than olive with most papers. Diluting Dektol more than 1-2 doesn't have very much effect on contrast.

A valuable aid with "hopeless" contrasty negatives where high values are overexposed or over developed is the use of a two solution developer.

The first tray is Kodak Selectol Soft; the second tray is Dektol. The print is developed in the first tray until the high values look good, then transferred to the Dektol briefly to set the blacks. If you make a test strip, try 90 seconds in Selectol Soft followed by 30 seconds in Dektol. These times can be juggled for very precise control.

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I recently completed seventy prints for a new book from negatives that had been printed before. The reason for the reprinting is that the printer's work is simplified and the reproduction quality is improved if the prints are made the same size as the reproductions. The maximum print size for this book format is $8\frac{1}{2}$ inches wide for horizontals and $7\frac{1}{2}$ inches high for verticals. It was interesting to see prints within these sizes from negatives that had formerly been printed up to 11×14 . It was quite surprising that many of the prints had a greater intensity and compositional strength in the smaller size.

Technically, the big difference is in contrast. The smaller prints on the same paper and grade appear snappier. To find out whether this difference is physically real or an optical or psychological illusion, I enlarged a step wedge to 7×9 and then to 11×14 . The number of steps that could be seen was the same proving that there is no actual change in contrast. That's hard to believe when viewing the smaller print next to the larger one.

Little attention is paid to the differences between papers of the same brand but different contrast grades. Aside from the difference in contrast, the same papers sometimes benefit from different handling. For example, Ilfabrome #2 with Velvet Lustre surface is one of my favorites. It is very rich with a beautiful print color that will tone only slightly. This paper when developed four minutes or more in Dektol 1-2 gives a great impression of depth. This is easily seen if you make two test strips; develop one for two minutes, the other for four

minutes. Then make prints that will match in general tone. A ten second exposure for the two minute print and an eight second exposure for the four minute print might produce similar values, but comparing the prints shows an apparent spatial difference. Why that happens with Ilfabrome #2 is a mystery to me. It doesn't happen with Ilfabrome #3 which looks as good (very good), at two minutes as it does at four minutes. But the #3 color is not as nice as the #2. #3, however, tones beautifully in selenium diluted 3 to 128. The color goes to a sort of cool, strong, brown-purple and the prints look "clearer." This is hard to describe, but if you try it, you'll see what I mean.

These papers are exceptionally fine and with Varigam for negatives that benefit from its colder tone, more brilliant atmosphere, or need variable contrast printing, I feel that most negatives can be accomodated. If you have thoughts or suggestions on any of the above, please send them along for inclusion in the next issue.

No one can know everything of value regarding the infinite variety of photographic materials and their handling. That requires a group effort!

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WORKSHOP

The dates for the University of Vermont Workshop are from July 8-19. John Bushey, Director of the School of Continuing Education, will send information on housing, costs, etc. if you drop him a line. His address is:

John Bushey, Director
Continuing Education
Office of the Dean
University of Vermont
Burlington, Vermont 05401

Depending on the size of the enrollment, two outstanding photographers and teachers have kindly agreed to assist me. They are Steven Nestler, Curator of Photography of the Springfield Museum, and Wes Disney, Editor of CAMERA 35 magazine.

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TRADING POST

Descriptions of equipment you would like to buy or sell is listed in the newsletter at no charge...

I WANT TO BUY:

A 28mm. FD Lens for a Canon
Laird Parker
2222 Dunstan
Houston, Texas 77005

An 8x10 camera or 8x10 Sinar back and bellows, 8x10 holders
Paul Caponigro
c/o Zone VI Studios
147 Hillair Circle
White Plains, New York 10605

Rosemary McIlvain of Carversville, Pennsylvania writes:

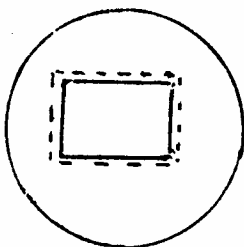
Dear Fred Picker,
Since you're the man who seems to know all about equipment and who brought me the cold light head (thank you), I'd like to ask about negative carriers. It's taken me a mere four years to realize that I lose quite a lot around the edges and sometimes its important not to. I have a Simmon Omega carrier - 35mm. Is there a more accurate one? I would appreciate any suggestions...

Dear Rosemary:

Well, I don't know all about equipment (or anything), but I think I know enough about negative carriers to help a little. (Why manufacturers make things the way they do is a mystery. I don't believe I own a single piece of equipment that I, or a camera shop, hasn't modified in some way). Neg carriers are easy.

Put it in a vise and file the hole bigger. Check with a discard negative and keep filing until you can see about 1/16" of film edge all around. It doesn't matter if you overdo it as there is plenty of film edge on a 35. Next paint the whole carrier, especially the newly filed edges, with mat black paint to reduce flare.

Cut to dotted
line



Jim Hughes, Editor of CAMERA 35, was instrumental in the magnificent effort to get Eugene Smith home from Japan. Because of beatings Smith received while recording the effects of industrial pollution, he has temporarily, we hope, lost most of his sight. He is without funds. This great man who has given so much of himself desperately needs all the help we can give him.

Smith is in New York now, largely through the efforts of Jim Hughes who raised the funds to purchase airline tickets. Now Smith needs medical help.

Zone VI is a fairly new enterprise and hardly a financial giant, but if you will send a check to us - make it out to W. Eugene Smith - we will match it with one of our own up to a total of \$500.00. If you would like to include a note to Gene, it would mean a lot to him. Please send the check to Zone VI.

*Thank You,
Fred Pickar*

ZONE VI Newsletter

NEWSLETTER 7. 74. 4

Zone VI Studios will relocate on August 1, 1974.
Our new address is:

ZONE VI STUDIOS
PUTNEY, VERMONT 05346

For your convenience we have enclosed a stick-on label to apply to your copy of "The Zone VI Workshop."

Some very fine photographers live in Vermont. Ralph Steiner is working on a Guggenheim in Thetford Hill, Steve Taylor from Fairlee is commuting to Newfoundland gathering material for an upcoming book, Greg Thorpe lives in Putney, and there is a fine new photographic gallery in Brattleboro. The Fuzzy Bean Gallery (named after someone's dog) is a joint effort of Carlos Richardson, Mark Tenney, and Jock Sturgis. They are all serious and accomplished photographers and they show work that they feel deserves to be shown.

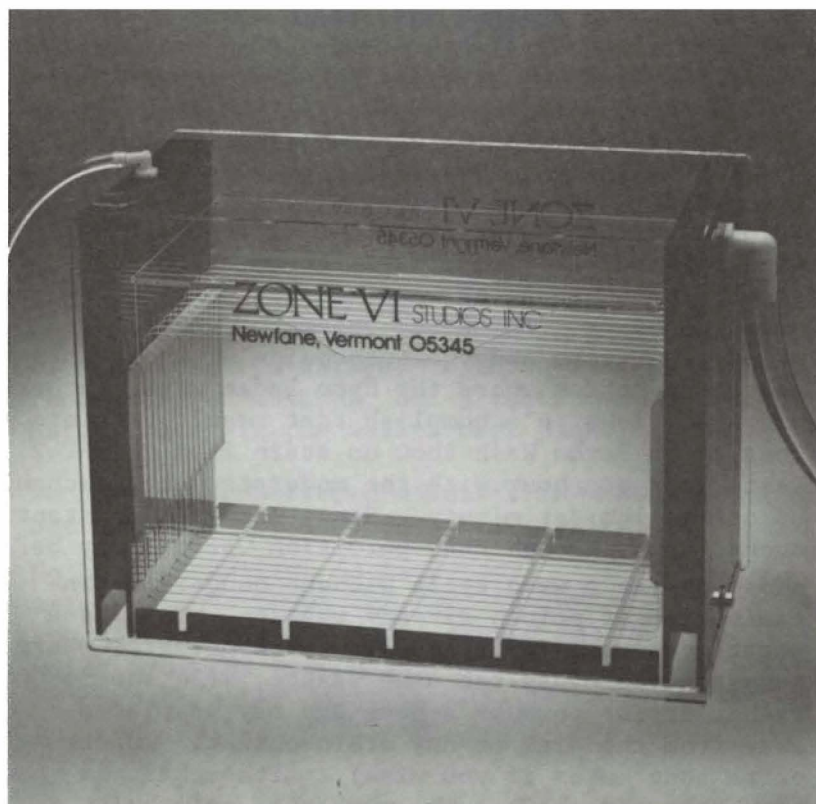
Putney, located in the southeast corner of the state, has a population of 1,100 in addition to Windham College and the Putney School which I attended several years ago (1945!). The countryside is green and gentle in parts, rugged and wooded in others. Some of Paul Strand's most sensitive images were made along the West River Valley. There are many streams, lakes, and much heavily timbered land. Protected forest covers a large part of the state and there are more gravel than blacktop roads. It is a peaceful and beautiful place - a fine place for a photographer to live and find the time and atmosphere conducive to serious work.

Because of the physical beauties of the state and excellent photographic facilities at both the Putney School and Windham College, we plan to have one week workshops in the Spring and Fall.

Moving to Vermont will enable us to expand the production of our Zone VI products. We need economical space and good craftsman in order to introduce products that should be made available. Costs are soaring in photographic equipment as in all manufactured goods. (A Schneider lens that sold for \$375.00 four years ago is \$1,100.00 now). In addition to material and labor costs, the economics of distribution are largely responsible. For example, our new print washer contains material that costs us almost \$70.00. If we were to market it through normal distribution channels, the retail cost would approximate \$300.00. Through our own manufacturing and direct sales facilities, we can control the quality of our products and cut out the distribution mark-ups.

I think this washer is the best print (and film) washer available. Four years ago I built a plastic print washer that looked somewhat like it, but had several differences in its operation. To begin with, the water injected from the bottom and overflowed at the top which made it necessary to place the washer in a sink. Vegetable dye added to the water showed that forcing water up was very inefficient. Over four times the amount of water to fill the tank was required to effect a complete change of water. (Even more water would be required to drive heavy hypo-laden water up through the prints and over the top). This not only wasted a lot of water, it also lengthened the wash time. Tests proved conclusively that

agitation of the prints was practically meaningless. Agitation is only helpful in separating prints so that the hypo can leach out freely. What is needed is a constant enveloping bath in clean water. (Leitz now recommends four baths in separate tanks of clean water for best film washing. No running water, no agitation!) Archival washing requires time, clean water, and print separation.



PW-1 Print Washer

The final washer design (after four prototypes) provides: (1) A separate compartment for each print. These compartments are twice the width of the compartments of any other stand-up washer. There is, therefore, twice the water volume per print and, in addition, unloading the washer is simplified. (You can get your fingers into the compartments to pick out the prints). Prints do not move, so they cannot be damaged; (2) The water is fed into the washer from the top; the washer drains from the bottom. Since hypo is heavier than water, it makes sense to take it the way it wants to go. There is close to 100% constant replacement of contaminated water with clean water. No water is wasted, washing is speeded up. Risers keep the prints about $1\frac{1}{2}$ " above the tank floor and the hypo continuously sinks into this area and out through the bottom drain. A trickle of water is sufficient to operate the washer at full efficiency. The washer is so efficient that with no water added at all, tests show that an archival wash occurs in about $2\frac{1}{2}$ hours. The large volume of water, the print separation and the suspension of the prints above the bottom where the hypo laden water gathers, are sufficient to accomplish that result. Prints treated in Perma Wash show no stain from the HT-2 test after one hour with the moderate water exchange of one gallon per minute. Since water is constantly sucked down through each partition, prints may be added during a wash cycle without danger of contamination of prints already washing. This is a great advantage for schools, workshops, etc. where several people use the same washer; (3) The washer drains through a hose and may be placed away from the sink or any drain outlet. (Order extra long hoses if you wish). Although it is extremely compact for the number of prints it can handle (30 8x10s or 15 11x14s) it takes up

the space of a 15x17 tray. If the washer is placed outside of the sink, the drain hose can be directed into the holding tray so prints can be washing while others are getting a pre-wash in the holding tray. The tank is easily drained for washing if the drain hose is pulled down out of its holder. It should be kept filled with water at all other times to prevent warping of the separators; (4) The separators are removable for cleaning. A swab with a sponge containing household detergent will remove any accumulated slime. The frequency of this treatment varies with local water chemistry, and in White Plains it was necessary twice a year. Two extra half height partitions are included. These replace six or seven full height partitions to provide a mid-tank rest for film on reels. Sixteen 35mm. reels or eight 120mm. reels can be washed at one time. A special rack with separate compartments for each negative is available for 4x5 and 5x7 sheet films. 8x10 films are inserted vertically just like 8x10 prints. Thirty 8x10 negatives are archivally washed in 20 minutes with no possible damage. Films should be removed after washing, but prints come to no harm if left in the washer over night.

We have also developed a roll film washer operating on the same down draft principle.

No hose connection is necessary. The washer is merely placed under the tap, the water flows down through the reels and out around the bottom. The water from the bottom of the tank drains up through an outside water jacket. This jacket insures that the tank will stay filled even if the water volume is reduced.



These washers are hand made of heavy plexiglass and they are beautifully finished. Each is thoroughly tested. We think they are the best made, most efficient washers available and we unconditionally guarantee them for two years. We are proud of them and will not rush production. Orders will be handled as received, but advance orders indicate that four to six week delivery should be anticipated.

Washer Prices:

<u>Catalog</u> <u>Number</u>	<u>Item</u>	<u>* Price</u>
PW-1	Print Washer (15-11X14, 30-8X10)	\$ 195.00
FWR-2	Film Washer Rack (for PW-1)	45.00
H-6	Extra Hose 3/4" per foot	1.00
FW-2	Film Washer (2-35mm/1-120mm reel)	15.95
FW-4	Film Washer (4-35mm/2-120mm reels)	20.75
FW-8	Film Washer (8-35mm/4-120mm reels)	27.75

* Items shipped prepaid except PW-1 Print Washer which will be shipped freight collect via UPS or REA.

To obtain price quotation for washers having different capacities than those listed above please send specifications of your requirements.

A "NEW" DEVELOPER

Years ago I used an outstanding film-developer combination. It was 35mm. Kodak Panatomic X and FR-x22. One day my dealer told me that x22 was no longer available, so I tried several developers before standardizing on Rodinal, which was very nice - but the negative quality didn't really compare with x22 negatives. The grain wasn't as fine, the gradation was not as smooth. Sharpness appeared the same. The other day I was picking up some supplies at another dealer's and there on the shelf was good old x22. The dealer assured me that they had never stopped making it! I bought some, tried it again, and it is as good as it ever was.

Most people know how sharp and fine grained Panatomic X is, but very few know how fast it is. Kodak rates it at 32, but using a camera and meter that gives proper Zone I density to Tri-X when that meter is set at ASA 200, I get proper Zone I density for Pan X with the meter set at ASA 64. The speed relationship between Tri-X and Pan X is only $1\frac{1}{2}$ stops. (Kodak's speeds of 32 and 400 indicate about a $4\frac{1}{2}$ stop difference in speed). Why this is so I have no idea, but the test has been made often under tightly controlled conditions and the densitometer readings repeat the $1\frac{1}{2}$ stop speed difference. As a practical matter, Tri-X exposures in bright sun usually run very close to $1/250$ at $f\ 11/16$ for "realistic" rendering. For Pan X under the same conditions, exposures are $1/125$ at $f/11$. Try those exposures, make "proper proofs" and you will agree. $1/125$ at $f/11$ (or $1/250$ at $f/8$) for Pan X is more than adequate to resolve most shutter speed and depth of field problems with a hand held camera. For hand held exposures at lower light levels the last bit of speed is important so Tri-X becomes the logical choice.

Pan X has unfortunately been discontinued in the 120 size and I find that 35mm. Pan X negatives make prints that match or exceed the quality of 120 negatives made on most other films. One notable exception is 120 Agfapan. This film is something special, but a tripod is usually required since the speed is only about 25 ASA.

Incidentally, Pan X has the reputation of being "contrasty." There is surely no doubt that high values block if Kodak recommendations for exposure and developing times are followed. Any film overdeveloped is "contrasty," but if Zone VIII exposures are developed to Zone VIII density (see "Normal Development" in "The Zone VI Workshop") Pan X, like any other film, will be tailored to proper contrast range for your equipment and materials.

The need for careful testing of everything cannot be overemphasized. I broke the rules recently and got what I deserved - rotten negatives. Just before leaving for a trip to Vermont a new 8x10 back and bellows arrived for my Sinar. I loaded some 8x10 holders with Tri-X and was on my way. I assumed that Tri-X 8x10 sheet film would be identical to Tri-X 4x5 sheet film, especially since the instruction sheets in both boxes were identical. Well, the 8x10 is $\frac{1}{2}$ stop slower and my normal 5 minute developing time is too long for 8x10. Harsh negatives resulted - thin in the shadows, blocked in the high values. (Kodak recommends 9 minutes for both films!) To make sure that in some way I had not made an error in the field, I loaded an 8x10 sheet and scotch taped a 4x5 sheet over it, gave them both a simultaneous Zone I exposure at ASA 200, developed them together and the results bore out my previous findings. The 8x10 didn't reach Zone I density, the 4x5 did. The next step was a development time test - same set up - the 4x5 taped over the 8x10.

A Zone VIII placement, simultaneous exposure, and 5 minute development (both films together), gave a 1.3 total density to the 4x5, 1.42 (O.K. for normal plus one) density to the 8x10. Four minutes for the 8x10 gives me 1.30 total density. Base plus fog density (.06) is the same for both films, but other than that, they haven't much in common.

#

The last newsletter contained an appeal for funds to help W. Eugene Smith and it is wonderful to report that with your help I was able to turn over about \$1,000.00 in checks. That amount was $\frac{1}{4}$ of the total raised for Smith and that's really something. With that aid, some fine doctoring and a lot of faith, Smith's eyesight is almost normal and he has already left for Japan to complete his book. Photographers are special. Thank you.

#

The book, "Rapa Nui" (Easter Island) has gotten a fine reception. The text and photographs were done by me and Dr. Thor Heyerdahl added a fascinating and authoritative historical perspective. Janice Krenmayr of the Seattle Times said, "Fred Picker's superb, sweeping photographs and his descriptive word paintings of the island may be a treasure in future years." Archie Satterfield, editor of ARTS magazine wrote, "Fred Picker's book by contrast," (contrast to another book) "is a collection of salon (ouch!) black and white photos of the island...His photos are invariably stunning..." Some nice person whose initials are C.E.D. wrote in the St. Louis Post Dispatch, "Some very talented and loving attention has been paid to Easter Island by photographer Fred Picker in "Rapa Nui." And the Yorkshire Post in England said, "Thor Heyerdahl contributes an historical summary to a magnificent volume of photographs

and text. Already named as one of the best photography books of the year." Smith's Trade News called "Rapa Nui", "...the one book that interested me most personally, the most visually arresting book of the month...A striking portfolio of superb black and white photographs of Easter Island."

All those things are nice to read, but nothing meant as much to me as Paul Strand's reaction when I showed him the book. He said, "The photographs are just beautiful; it's the nicest book of this kind that I have seen."

Anyway, if you would like to have a copy of "Rapa Nui" we will send you one at the bookstore price of \$14.95. Your copy will be autographed and a separate supplement (not in the bookstore copies) entitled "About The Photographs" will be included. This is a technical discussion of equipment, materials, and procedure that went into the making of the photographs. In addition, we'll enter your name for a one year subscription to the newsletter. (If you are already a subscriber, we'll add a year at no charge). \$14.95 covers it, except for Vermont residents who must add state tax. We'll pay the postage. An envelope is enclosed.

#

The enrollment for the University of Vermont workshop, July 8-19, is larger than expected (about 30 students) so Wes Disney will be lending a hand. He is a fine photographer, an excellent teacher, and a most likeable person. It will be nice to have him along.

#

And it will be nice to get back to Vermont. I remember Professor Francis Colburn's warning to my class at the University of Vermont; "Never go down country; never go away; never go south of Rutland, without first sewin' your money in your underwear."

*Best Wishes.
Fred Picker*

ZONE VI Newsletter

NEWSLETTER 10/74-5
Loftleider Flight 700
N.Y. to Reykjavic 10:30 PM

Since the last Newsletter this seems the first chance I've had to sit down, (enforced) and gather a few thoughts.

The summer has been extremely hectic. The first two weeks in July were spent conducting a workshop at the University of Vermont. There was a fine group of 34 students of all ages and stages of expertise and varied walks of life. There was lots of enthusiasm and humor, and I think everyone enjoyed the experience as much as Wes Disney and I did.

As soon as the workshop was over I went back to White Plains to pack and take apart the darkroom preparatory to the move to Putney. Then delivered the White Plains house to the new owners, moved into the Putney house, unpacked, installed, painted, plumbed, electrified everything and built a new darkroom from scratch. It's all finished now and after about a day to take care of odds and ends I'll be able to process negatives and make prints of this trip. It's an awful bother to move, but in this case well worth it.

The light was so beautiful this morning that I had very mixed emotions about leaving.

Putney, Vt. 05346

But the earth forms of Iceland have always fascinated me, and you "grab a chance," or regret a "might have been."

This trip is for the purpose of making photographs to be included in a book on Iceland. If necessary, there will be a second trip in the spring to reach areas that may be inaccessible at this time of year.

In the hold (I hope!) is my 4x5 camera, tripod, and 35 mm. camera. Four lenses- 90 mm, 121 mm, 210 and 300 mm are for the 4x5, and a 35 mm and 105mm are for the Nikon. Film is 400 sheets of Tri-X, five rolls of 35 mm Pan-X, ten rolls of Tri-X and five rolls of kodachrome.

In addition to the photographs for the book there are two, perhaps three depending on your interpretation, commercial assignments to do. One is for this airline, another for the Loft-leider Hotel in exchange for room and board, and the third is to prepare a color slide show to be presented at Putney School. After considerable negotiation with Tom Jones, the director, an honorarium agreeable to both of us was decided upon. A truckload of manure for my vegetable garden from the Putney School farm. The form of the fee was my idea, but his remark concerning "payment in kind" I consider inappropriate.

In addition to the photographic gear already mentioned, there is what I call my "agony kit." This is a bag containing spare parts for the Sinar, an assortment of screwdrivers from a jewelers set for lenses to one the size of a wrecking bar. In an emergency it can be used for anything from self defense to splicing a shattered tripod or human leg. There is black tape

for bellows leaks, gaffers tape for everything including stopping light leaks in a closet or bathroom so sheet film can be loaded. There are three 5x7 trays, a small bottle of HC 110, a pint of ascetic acid and a quart of made up Rapid Fix. Everyday or two several sheets and the first few frames of a roll of black & white film can be developed to make sure the equipment is in order. These first few frames will be exposed only for equipment check purposes, and will be discarded.

The films carried are all from the same emulsion batch and have been tested for speed and development time. Since films of the same brand can be of such diverse response characteristics, my rule is to buy an estimated one year supply all the same size, type, and emulsion batch, test it and store it in the refrigerator.

There isn't too much room in my refrigerator so I recently rented a cold storage locker. In it resides 2,500 sheets of Varigam. Dupont has decided to discontinue this fine paper. Perhaps they prefer to concentrate their efforts on the increased production of Orlon. Paul Strand told me he stocked up and froze a quantity of superb French paper called Lumiere a dozen years ago. Most of the prints in his recent retrospective show were made on that paper.

He lamented the fact that our materials are of steadily decreasing quality. Because the majority of photographers know little of print quality and much about price, the better and more expensive papers are constantly being discontinued. Cykora, a marvelous paper, was discontinued earlier in the year. If Ilfabrome should disappear, we will have the choice of printing on R.C. or giving up photography. Tough choice.

Quite a few letters have been received requesting procedures for precise exposure of color transparency material. This is my procedure. I photograph a Kodak Neutral gray card (fill the frame). The first exposure is made on Zone V at the manufacturers suggested rating. The next exposure is at $3/4$ the manufacturers rating ($\frac{1}{2}$ f/stop more), the next at $1/2$ the rating (a full f/stop more). Then an exposure at $1\ 1/2$ times the rating and finally an exposure at twice the rating. After processing (I send them to Kodak) use a razor blade to cut out $1/2$ of each transparency. The projector and screen are set up under normal viewing conditions. The first slide is projected on the screen and the neutral test card is held or taped on the screen in the area of white light shining through the cut out section of the transparency. The slide, projecting a tone that matches the tone of the gray card, is the one exposed at the proper ASA setting. This method is absolutely foolproof because you are matching a Zone V exposure to a Zone V value.

Here we have not only meter and shutter variables but the strength of the projector illumination, the reflectance of the screen, the distance of the projector to the screen and the age of the bulb. The above test cancels out all variables.

In the field, realistic transparencies can be made consistently after this test is complete using the Zone System. We have just proven that a Zone V exposure reproduces a Zone V tone (as well as the color of the subject card). A portrait with flesh tones placed on Zone V would not be realistic. Although the color would not match the gray card, the depth of tone would, and the image would be too dark. Flesh tone for realistic rendering is placed on Zone VI.

Other values can be metered to see where they fall, but it must be realized that the range of color film is only from about Zone III to Zone VI or VII. If you would like to see a demonstration just make a series of exposures of a card from Zones 0 through IX and project them. Zones Zero through II will be unrelieved black, VII through IX will be blocked white.

An important point that many people do not understand is that a film's tonal range has nothing to do with the tone or color of the subject. For example, a black card and a white card side by side in sun or shade will look like Zone I and Zone VIII, but the meter shows only about a 5/stop (Zone) difference. If you place the black card on Zone I, the white card will fall on Zone VI. Some photographic writers advocate photographing a Kodak step tablet. This is a group of tones from black to white printed on paper. They say that if you expose and develop correctly you'll be able to make a print from that negative that shows detail in all the tones. I would add that since the paper has a range from black to white of about 1-30 (five Zones) and the film has a printable range of 1-256 (eight Zones) you could be off a stop and 1/2 over or 1 1/2 stops under and still get all the values. You prove nothing. But put the black card in the shade and the white card in the sun. To make a negative of that set up (full range, 1-256) which reproduces tonality in both cards requires precision of exposure and development. If you have completed the tests in the Zone VI Workshop, you can do it easily. Sometimes I wonder how many of the readers have ever completed the tests.....

We just flew over Greenland.

I guess I'm a hypochondriac about photo

equipment. There are no workers in any other artistic medium that have to work with such pitiful tools and unresponsive materials. They are getting more expensive and poorer in quality all the time. Why has there never been a Stradivarius of cameras? Marty Forscher, who I believe knows more, in a practical working sense, about the innards of cameras than any one around, recently told me that the newest, more expensive, "improved" cameras are almost impossible to repair. Their "improvement" is mainly in cost cutting for the manufacturers benefit. Parts that were metal are plastic. When something breaks (and something always breaks) Marty says he can't find any part strong enough to screw a new part onto. Strand told me he was considering buying a new camera, a 4x5, but couldn't find anything he liked. He seldom uses his old camera, the 8x10 Deardorff, any more. He's been sticking of late to his "new" camera which is a 5x7 Graflex he bought in 1931. Even that is getting to be a bit much for him to handle, he says. Strand is 82.

My Sinar Standard is about 20 years old. I paid \$250.00 for it used and recently a fellow offered to swap me a new Sinar "P" with gear shifts and gadgets and plastic knobs. It costs about \$1,800.00. That would be like swapping an M-3 Leica for a new Nikon. But people do it. My Nikon is a ten year old job I won in a photo contest. Marty says it's much better than the new ones, but if anyone out there has an M-3 Leica to swap call me.

Even the accessories are poorly designed. Virtually every camera case is brown or black. One year at Yosemite we put thermometers in a black case and a white painted case and set them in the sun. After 10 minutes the temperature inside the black case was 25 degrees higher than

in the white case. All my camera and film cases are painted white whether fiber or metal or leather. Same for my car.

Let me tell you about my car. I got it this summer and it's a country photographers dream. A Chevrolet with a station wagon body on a 1/2 ton pickup truck chassis. It has about 14 inches of road clearance and full time four wheel drive. It has oversized heavy duty everything like springs, shocks, and battery, an oil cooler, transmission oil cooler, air conditioning. It's a "Suburban" model. It seats 6 but you can fold the back seat forward and get a flat floor 4x8 feet. With an air mattress a sleeping bag, a kerosene lantern and a stove you can go anywhere and stay awhile. It has a 40 gallon gas tank. It's white with a "Zone 6" (I could only get five letters) Vermont license plate, so if you see me on the road, toot your horn and we'll have coffee. When I get through with it there will be a battery operated refrigerator, a shooting platform on top, black out curtains so I can load or develop film, and a swing down table to work on.

The fellow on my left is an Icelandic sheepman. He just told me there is a restaurant in Reykjavic that can prepare herring 90 different ways. Swell. Better than Easter Island where they could only prepare bananas (and you wouldn't want to eat anything else) one way. Lil Farber called it, "Bananas in Dektol." That's what it looked like and that's what it smelled like.

Anyway, I wish I had that car in Iceland. It's roof is about six feet high so you can get the camera about 12 feet above the ground. That's the way to photograph landscapes. That relatively small extra elevation makes an enormous difference in providing an atmosphere of great expanse.

Just heard from Paul Caponigro who went West to Santa Fe and I fear he won't be back. There is some good news though. He will soon have a book completed of a remarkable series that he photographed several years ago. The subjects of these images are sunflowers and they are just marvelous. I haven't seen the book, don't know the size or price but will keep you informed. It was printed by Meriden Gravure, double impression, so it should be very fine. I hope so. The photographs surely are.

Dinner just arrived. Some kind of gray (Zone IV) meat and an apple. I'd rather have a herring. This isn't a Newsletter, it's just a letter! Maybe it's a letter because I feel really friendly toward all of the people that I've met or have heard from since the Zone VI Workshop came out about 18 months ago. I'm also proud of some of the things we did together, especially the thousands of dollars we raised for the Friends of Photography and for Gene Smith's medical expenses. I'm grateful for the understanding of those who waited impatiently but politely for out of stock items. It seems we've always been at least two months behind on viewing filters and the print washers will be the same. We're small and there have been growing pains, and the biggest pain, they tell me in the shop, is me. If I'm not proud of it, it doesn't go out.

And I'm proud too that every Zone VI item is unconditionally guaranteed. If you aren't happy, send it back for refund. No one, big or small, in the industry can come close to that.

Imagine buying a Hasselblad and then taking it back to tell the fellow "I don't like the way it handles, it doesn't feel right, it's not for me." They may guarantee to make it work if it doesn't, but we guarantee you'll want to keep it.

People constantly call with questions about cold light heads. They're always startled when we tell them to order it, print with it, keep it a month and if it's not for you send it back. Apparently it's for everyone, we've never gotten one back!

It was a fine experience to meet so many pen pals and customers at the University of Vermont Workshop and though it's many months away I'd like to mention future workshops that you might consider. We'll have one at the Putney School in June. It's a great facility, in beautiful country, darkrooms, fine living quarters, farm fresh meals. I want to make it the best workshop ever. It's surely the best facility anywhere and the instructors will be Paul Caponigro (natural scene and printing techniques), Bruce Davidson (small format, documentary, portraiture). Wes Disney and I will handle technique and field trips. Specifics such as exact dates and cost haven't been worked out, but please make a mental note- June 1975, and drop a line if you are interested.

I brought a few letters along that may be of general interest: Tom Levy from Philadelphia says, "Your cold light head has changed my erring ways. Good negatives are no longer difficult to print. I used to sweat to get full range negatives and then fight to get them on paper. I get them on paper now, usually in a straight print.

Perhaps you can answer a question? In one recent issue of the Newsletter you indicated that Dektol hurts lower tone separation. I've been adding Dr Pratt's - (Vestal's Book of Craft) to Dektol and it gives some snap, but still doesn't separate the lower tones well. Would D-72 be easier to control? Or is some mixable formula similar to Ardol better? Could you list it in the next issue?"

Dear Tom,

Of late I've been diluting Dektol 1-3 instead of the recommended 1-2. It helps. I think Ardol might be an answer, but the high value separation is not as good as Dektol. Perhaps Ardol with Bromide added or Benzotriazole might do the trick. Nothing will be of help if the negative is lacking in low value density. Printing is nothing but trial and error. A great developer with one paper may be dead with another. Good paper is the biggest single factor and, of course, good negatives. You just have to experiment constantly and force the result you want.

John Freitag from Indiana asks why long exposures require short negative development time. He would like to increase negative contrast.

Dear John,

Long exposure increases the contrast of the latent image. So, to get a "normal" negative you decrease development time. Normal development will give N+1 (roughly). Pros sometimes use Neutral Density filters to lengthen the exposures for increased contrast. What happens in, say, a 10 second exposure is that the high values start to expose the film as soon as the shutter is opened, the low values may take 3-4 or 5 seconds before they break the threshold, so you get a 10 second exposure for the highs and a 6-7 second exposure for the lows. This results in an increase of contrast. a good question John.

If you receive this letter, the pilot is telling the truth. He just said, "We are about to land as scheduled."

*With Best Wishes
Fred Fisher*

ZONE VI Newsletter

NEWSLETTER 2/75-6

Groundhog's Day

2 February 75

When I was a kid "Jungle Jim" was the serial feature at the Sunday afternoon movies. Each installment ended with a blackout as a tiger was about to land on him, his raft was being swept over a waterfall and a python was squeezing the air out of him - simultaneously! Though less dramatic, that is about how the last NEWSLETTER left off and, for those who wrote to find out what happened, I'll end the serial now.

I spent nearly a week working out of Reykjavik, Iceland in a rented V.W. Beetle. Reykjavik is the big city and about half the population of Iceland - 180,000 - lives there. The city is very cosmopolitan, clean, crimeless, and friendly. My interest was in the countryside, however, and a half hour out of town, it's all dirt roads and wilderness. Iceland is dramatic: - huge waterfalls, grand vistas, exciting rock formations, many rivers, fjords, glaciers, icebergs and, in October, exquisite light. But you have to be quick - or slow. Often I

would set up for an exposure and just make or miss the picture as a blinding sleet storm or rain squall would strike. On one occasion I sat in the car a whole day, my camera and tripod covered with a big plastic garbage bag. Every hour or two I'd jump out and make an exposure, but none (until the last) had exactly the light I hoped for. A lot of effort, but one of the most exciting photographs I've ever made. It's of the small town Eskifjordur where white houses nestle along a fjord. Above the town rises an enormous dark, brooding wall of rock culminating in a snow capped peak. The good negative was made as the elusive sun lit up the houses like a floodlight and touched the snow peak while the cliff remained in deep shadow. The photograph was made from across the fjord and about 1,000 feet above the town with a 4x5 and 300 mm lens, K-1 filter on Tri-X. The weak evening light dictated an exposure of 1/5 sec. at f/22.

After the first week, I decided to try to drive completely around Iceland, though there was a difference of opinion on whether it is feasible at that time of year. It is - barely. I drove 3,000 miles, staying mainly at farmhouses. This in itself was quite an adventure in the fine art of communicating without a common language. In Reykjavik everybody speaks English, but outside the city the language is Icelandic. This is the original Norse as spoken by Leif Erikson which sounded to me like a cross between German and one of

the Scandanavian toungues. So out in the countryside I smiled and gestured a lot. The people were marvelous and to offer payment for staying in their homes would have been an insult. But photographers can always provide nice gifts and I made family group portraits on Polaroid.

The interior, which is impassable after September first, is completely uninhabited. The perimeter road is dirt, quite rough, and lonesome! The population is so scattered that individual farms are shown on the national road map. There is the feeling of vast space; sometimes bleak, sometimes, warm and rich - always beautiful to me.

I made 160 exposures (including duplicates) on 4x5 Tri-X and exposed four rolls of color. Disaster struck on the color. Two rolls were the new "improved" Kodak 25, the other pair was Kodachrome II. The "25" came back with a horrible purple hue over all. The Kodachrome II was fine. My fault. I didn't test it before I left. I thought I could get Kodachrome but, at the last minute, I couldn't. Photography is an unforgiving taskmaster. You always pay for your sins.

I stayed a marvelous month and would have stayed longer, but the weather was deteriorating and the days were getting short. In the summer there are 24 hours of daylight; in January only two or three.

My working days started at about 9:30 and ended at about 4 PM. That seems short, but I could work a all day in beautiful slanting light as the sun never rose above about 40° (Neither did the temperature!)

On my return I made prints and showed them to the editors at Amphoto. They were enthusiastic to the point of changing the original concept of the book to a large format portfolio. Many of the pictures are huge vistas and really should be shown at least 10"x13", so I am pleased.

I want to return to Iceland in the Spring. It is the most exciting place I've ever photographed. I think a visit by any photographer might well be a high point in his career.

Many calls and letters have come in regarding the discontinuance of Varigam and the search for substitutes. So far I have worked with Ilfobrom extensively and I think it is the finest paper that I have tried. My preference is for the surface designated "Velvet Luster" as I find the glossy a bit hard. But that is a matter of personal taste. I have just about standardized on Dektol 1-3 with developing times of four to six minutes. The prints are rich, the color is toward a strong, warm brown. The high values are exquisite, the blacks are velvety.

A variable contrast paper that I recently tried after unexciting results several years ago is DuPont Varilour. It is vastly improved and is the only

paper I know of that doesn't seem to dry down at all. I had to throw away the first prints I made on it because I printed with drying down in mind, but they stayed a trifle weak. You can print on Varilour the way you want the finished print to look. Dektol 1-2 for about three minutes seems right, but I've only used one box so far and am still working with dilutions and times. The VLTW (brilliant white glossy) surface is very nice. This is a paper somewhat similar to Ilfobrom if a variable contrast paper is needed. Varilour tones like mad. One-40 (3 oz. per gallon) is strong enough to tone it in three minutes. One - 20 tones it in an uncontrollable minute!

Both Ilfobrom and Varilour are warm-black. They are beautiful for sunshine scenes and portraits. They have nice characteristics, but some subject matter seems to require a colder tone. I'm trying to see if I can shift the color, but so far have had very moderate changes from additives like glycin and benzotriazole. Whether you can change inherent tones radically (from warm to cold tones) I don't know, but I am working on a home brew print developer and will write it up next time if anything good happens. If you have any ideas on the subject, please write.

Some nice letters came from people who liked the ASA test for color transparencies and they all asked if there was a similar test for color negative materials.

There must be, but as I have never made a color print, I don't know. You would, I imagine, print for film edge. With minimum print exposure for maximum print edge density, a properly exposed negative of a gray card would give you a print that matched the gray card. I need help on this one, so if you know, please tell me!

I'll try to answer the varied enlarger questions in one swoop. There is a sure test for enlargers that will answer all the questions. First, you need a negative with even density. The most dense negative from the film speed test or the thinnest negative from the development time test will do perfectly.

Set up for an 8x10 print. Open the lens and focus the grain sharply. That requires a grain magnifier. Stop down two stops and make a test strip. Pick an exposure producing a Zone VI or VII print value and then make an 8x10 print. If the enlarger is doing what it should:

1. The grain will be as sharp at all of the edges as in the center of the print.
2. There will be very little fall off at the edges and the corners. (They will be nearly the same tone of gray as the center.)
3. There will be no "hot spots" - dark areas in the print.
4. There will be no specs, spots, or other

imperfections.

Ideally, the print should be a smooth, even, gray all over with the same grain pattern from corner to corner.

TROUBLE SHOOTING (refer to numbers above)

1. If one or two edges show mushy grain but the other edges are sharp, the enlarger is out of alignment. The negative plane, lens flange, and easel must be made parallel. See your enlarger manual or, Zone VI Workshop and re-align. If all edges show soft grain, the lens is not covering well. A longer or better lens is indicated.

2. Fall off at the edges could be the fault of condensers if you are using the maximum size negative the enlarger is made for. My Omega 4x5 won't cover a 4x5 negative adequately with the condenser head, but with the 6x6 cold light it covers perfectly. Fall off also might be caused by a lens that is too short to cover the negative. A good 50 mm lens may barely make it on 35 mm. A cheap 50 mm lens will never cover a 35 mm negative and 75 mm is always better. 105 mm is good for $2\frac{1}{4}$ square, 135 for $2\frac{1}{4} \times 2\frac{3}{4}$, 150 for 4x5 and 200 for 5x7.

3. Hot spots are condenser problems. They just can't happen with cold light grids. Sounds like a plug, but it's a fact.

4. Specs or spots are either on the negative

or on the condensers. To check, remove the negative, open the lens, and turn on the enlarger. Turn out the room lights and put your head on the easel. Look up through the lens and prepare to be horrified by the dust you'll see on the condensers. Clean the condenser with a little ammonia + water on a soft rag. Brush off the new dust. Clean the lens - front and back, but don't use ammonia. Breathe on it, then wipe with lens tissue. Reassemble and make another light gray print without the negative. It should be clean and smooth without any grain. If not, look up again and try to find the problem.

The ultimate, I think, is a Beseler enlarger 23C or 4x5 - with Companion or El Nikkor lens of lengths as above for the various formats and a cold light head.

We're having equipment problems - not only in skyrocketing costs, but availability. Weston & SEI went out of the meter business. SEI informed us that they would've had to sell their meters for over \$500 to pay new material and labor costs and still show a profit. Our latest shipment of plexiglas for print-washers cost \$30 more than a shipment received just 6 weeks earlier - a 50% increase.

So give a thought to equipment you need, or will be needing. If you have the cash, don't wait. It will cost more later. It really is a good investment. I don't think I own any equipment that couldn't be sold for more than it's original cost.

*Best Wishes
R. J. P.*

ZONE VI Newsletter

Newsletter #7

May 1975

This Newsletter will be largely devoted to spring cleaning of my desk by answering some mail. People write more in the winter!

Perry Beaton, Lennoxville Quebec, said some good things about the Cold Light enlargements he is making and then goes on to comment, "I doubt if many people have a series of "Zones" up on their wall for each film developer combination that they use. Knowing how to test a film for E. I. and development time is an invaluable aid." He continues with his findings that virtually all films are incorrectly rated and finds that "super-soups like Microphen and H&W's goody don't do a thing for Zone I." He suspects it would be interesting to make groups of Zone prints from a group of film developer combinations to see the progression and scale.

For another good way to really tell

what a film and developer are doing you first expose it to locate Zone I. Then nail down the development time (which will be different for everyone). Once the development time is located for your enlarger and paper you have a constant. That constant is a Zone VIII density over film base and fog. For my enlarger and #2 Ilfabrom I want a Zone VIII density of 1.27 over film base. This density was adopted after the development time test was made as described in "Zone VI Workshop".

To test other films I just develop Zone VIII exposures to 1.27 over film base. Once that is done exposures from Zone II to Zone VII are also checked with the densitometer and a curve (H&D curve) is drawn on graph paper. The different combinations show pretty much the same curve shape except for a few shockers. Plus X looks poor with a very flat shoulder following a rather short straight line. D-76 developer makes Plus X worse in that respect and doesn't do Tri-X any good either. This flat shoulder is shown in prints by flat chalky high values, (no separation much above Zone VI). All developers I have checked have little effect on the lower values and the curve between Zone I and Zone V is virtually the same for a given film with any standard developer. When someone mentions a developer that "brings out shadow detail" he is just making conversation. Only adequate exposure can bring out shadow detail. The high values are where different film-developer combinations make big differences. These differences are much greater in the prints

appearance than is apparent on any graph or set of "Zone Cards".

The one most difficult thing that I find to communicate when teaching a workshop is the delicate area between rigid control and fluidity that is required if exceptional work is to result. For example, Mr. F. H. Pauli writes from Tucker, Ga., he is confused that both Ansel in his writings and I in "Zone VI" discuss a two minute print developing time as optimum. Then I cross him up in the last Newsletter by describing a 4-6 minute development time for Ilfabrom. And that is the problem. Everyone - including me - would like simple directions and straight rules that could be followed to produce "the best". Well, simple rules can be set up and if followed will produce "very good". "The best" is a conglomerate of physical subtleties in the final print that is the product of the photographers sensitivity to the world around him combined with his technical skill. The accomplished artist in any medium forces the materials to express his feelings. All that - I know - is of little direct help, but I can't say, "Do this" or "Do that". All I can say is "Try it". The great photographers will try anything and spend days making a definitive print from a "perfect" negative. The only thing I think I know about all of this business is that the difficult, interpretive fluid part comes after the negative. The exposing of the negative is rigid (once the values for the final print are determined) and the negative development is rigid. Then the interpretive part begins. To translate

that factual description of the scene (the negative) into an esthetic presentation of the experience (the print) takes all of the photographers sensitivity and determination. Funny, but the words "hard work" never, to my knowledge, appear in photographic literature or magazines.

Another thing that writers, including me, have avoided is the fact that the whole thing (producing moving photographs, or paintings, or music) is the result of mysteries we don't begin to understand. We have scratched the surface, but if a photographer always could previsualise completely, every exposure would result in an outstanding photograph. But that is impossible. The greatest photographers have tens of thousands of technically perfect negatives that we will never see. You can only previsualise to a point. As a worker gets better and better at it, his percentage of fine photographs per exposure increases, but chance still plays a big part.

Ralph Steiner, one of our very great photographers is practically a neighbor living about an hour north at Thetford Hill, Vermont. He has a very lovely show currently hanging at the Hopkins Center at Dartmouth College. If I answer his letter, the questions will be obvious.

Dear Ralph, I got your card asking if you had sent a letter. You had - the day before - and I am going to answer both right now! Photogs are all the same; punsters with no memory and often slightly strange.. (Caponigro called at 3:00 AM last night to

tell me (I think) that he bought a piano, got a Guggenheim like you, and is going back to Wales in June. Oh yes, he needs a print washer yesterday.

If you would show your film at my workshop and give us a talk, that would be marvelous. The kids at Putney School loved your talk and I was sorry to have missed you.

Regarding your paper problem..We all have the blues, greens? If "Nux Vomica" means what it sounds like it means, then that is what the new R. C. Papers are. When Weston said, "I don't care if you make a print on a rubber bath mat as long as it is a good print", I doubt if he really imagined anyone would try it. I saw Strand in March. As you say, he has been complaining about papers for forty years, but I think there has never been as much to complain about as there is now. I have a theory. The amateurs are ruining it for the rest of us girls. They buy a jillion dollars worth of junk so the manufacturers decide to discontinue the few remaining good papers. You ask, "Is R. C. archival?" I hope not.

I agree---only the denser areas of the negative (above about .80 over film base, about Zone V or VI) respond to the Callier

effect. If a neg has no densities above .80 it will print the same with condenser or cold light; dead.

All best,

Fred

Another letter from another superb photographer; Dick Garrod from Monterey. Dick has taught workshops with Ansel Adams and on his own, and has had dozens of shows. No one makes more beautiful prints. The West Coasters from the Carmel to San Francisco area are among the very best. Ansel of course, Brett Weston, Oliver Gagliani, Dick, Henry Gilpin, Jack Welpott, Judy Dater, Imogen Cunningham are just a few out of many exceptional workers. Dick's methods and materials are different than mine, but they surely work for him and he kindly brings us up to date in a recent letter which I'll answer or quote as required.

Dear Dick, A weekend workshop at "Friends of Photography" sounds fine. I will be at Virginia City at Oliver Gagliani's workshop and then will drive South to see Caponigro in Santa Fe. Maybe I could get over your way in between. (I already told Ansel I would!) Figure it for the weekend after Oliver's workshop.

I am going to take the liberty of repeating some of your methods since I know you are a non-secretive and helpful guy!

"What developer with Agfapan 2 1/4 film? I use Edwal Minicol 11. I fill a Nikor tank 60% full and agitate on a Kinderman agitating machine. I get very full compensating, high acutance development. I tried HC-110 at the "B" dilution, but didn't enjoy the highlights blocking up." Ed note: I found HC-110 blocks highlights on Pan X and also seems a poor developer for thin emulsion, slower films. Dick goes on, "I've also tried Ethol TEC which has a very good reputation for compensating action and acutance. Some friends in Oregon have used HP4 and HC-110 for portraits and nudes and the quality is superb, so as A. A. says, it's just a matter of what works for you!" For cut film I have been using Agfa 200 ASA for 8X10 - it's great. Full ASA, good, strong negative for contact printing. Dick also likes Ilford FP4 for 4X5 as the Agfa has been, that's right, discontinued. He says, "I love Ilfabrom but would like it a little warmer like it's predecessor, "Plastika". I'm still developing in Amidol, can mix it fresh every time and like the resulting print color but it's getting so expensive; \$25-\$35 per lb. that I may have to give it up. I also use Selenium toner in HCA (Kodak Hypo Clearing Agent) and always seem to come back to 1:20 dilution. However, my friend Howard Rand in Ann Arbor

uses 1-30 and gets a strong tone in one minute! He may develop for a briefer time than you or I which would give him a warmer color sooner. I develop within 2.5-3.5 minutes. Ed note: I go 4-6 minutes with Ilfabrom and Dektol diluted 1-3. "A. A. (Ansel) is using Dektol at 1-3 and 1-4 to get more detail and luminosity in the highlight areas." The rest of his letter is less photographic, so I'll stop quoting him here and just say Thank You Richard. The readers will doubtless get much from your description of your methods and the differences in the approaches point out graphically what you mentioned early in your letter. "As long as it works for you "

I would like to slip in an observation at this point. If you develop in Dektol diluted 1-3 or 1-4 be advised it wears out very fast. After about ten 8X10 prints to the gallon (of working solution) the developer will stop doing what it should. The loss of quality is sneaky, so the best way may be to count prints and that includes test strips!

I wrote, I fear, a sort of nasty letter to Du Pont asking them for some very specific information. I pointed out strongly that I didn't want form letters or form answers. I was a bit upset with big fellows in general as I had just received a form letter from Kodak intimating that the reason my color film shot in Iceland was ruined was in some way my fault. My fault because the film hadn't been aged enough be-

cause of the demand by me and the other photographers! Incredible. They also admitted that the Kodak 64 (I used Kodak 25 and had told them so) turned green (it turned red) and therefore they would replace the film. There was no mention of replacing airline tickets, time, car rental, etc. So I really gave it to DuPont! But Mr. J. E. Preston, district manager of the Clifton, N. J. office wrote me an intelligent and more polite letter than I deserved. He says that they have not made changes in Varilour since it first came out. (I had noticed changes and asked him about it.) Perhaps we are both right. I imagine it is hard to keep any light sensitive product constant. Garrod mentioned in his letter a "bad final batch of Cykora". I said in the last Newsletter that "Ilfabeton tones like mad" Well, the 11X14 did, but a recently opened box of 8X10 didn't. Anyway, Mr. Preston says they contemplate no new products with the exception of R. C. (That's what we need all right) and says they do not plan to drop either Varilour or Velour Black. I guess I'm just an old cynic, but my guess is that every happy hobbyist will buy the R. C. and the board of directors will see the sales figures and drop those good papers pronto in the interest of "efficiency" Hope I'm wrong.

Carlos Richardson is one of the finest photographic craftsmen that I know. He knows a lot about the history and application of non-silver processes and will be at the Putney workshop. His help in the darkroom and field will be valuable, but

of great interest will be his demonstrations of platinum and paladium printing. His personal work is something to behold.

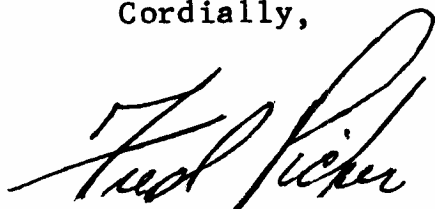
Platinum or paladium prints have a certain look that silver prints can't match. Recently I saw a marvelous Edward Weston show at The Museum of Modern Art in New York and some of the platinums made by Weston were exquisite. By comparison, the silver prints (made on far better paper than is currently available) were almost harsh in appearance. And they - the silver prints - were beautiful prints. But platinum (pakadium looks so much like it that it is often impossible to tell the difference) has a far longer scale than silver and shows amazing shadow and high-light detail.

The platinum solution can be painted on any paper. Of course finest papers - all rag, acid free, carefully selected for color and texture - are chosen. After the platinum solution is dried - about two minutes with a hair blower - it is placed in a printing frame in contact with the negative. (Enlargement is impossible because of the strength of ultra violet light required). The frame is then placed in direct sun - you can't print on cloudy days - from about 4 minutes to 30 minutes. The time varies with the density of the negative, the strength of the sun, and the paladium or platinum mixture (it can be varied for more or less contrast). Then it is brought inside and developed in a special developer. It develops fully in seconds and controls are practically

impossible at that point. Leaving it in longer won't darken it. The only controls are in the emulsion mix, the color or character of the paper chosen, and the length of exposure. Though it is troublesome and slow the chemicals are expensive, there are workers whose pictures are ideally suited to the process and who wish to work in this way. They really believe in what they are doing and are willing to go through a bit of pain to get the desired result.

If you are coming to the workshop, I look forward to finally meeting you. If you are not, my best wishes for a pleasant summer and hopes that perhaps next year we can get together.

Cordially,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the word "Cordially,".

ZONE VI Newsletter

NEWSLETTER 8. 9/75

The workshop at Windham College ended on July 23 after ten very exciting days. I have never attended or heard of a more rewarding workshop. The reason for it's success was, as always, the people. Those 47 who attended were exceptional people and outstanding photographers. The quality of the work was so high in fact, that attempts to divide the group into smaller units of equal ability were abandoned and we divided them in alphabetical order. The staff was wonderful. Wes Disney, Steve Nestler, Carlos Richardson, Peter Mauss, and our administrative guide and problem solver, Lillian Farber, made each session a pleasurable learning experience. Ralph Steiner was kind enough to visit us on the first and last evening. He showed us some very beautiful films and shared some of the insights he had gained during a lifetime of creative accomplishment. There was plenty of fun and humor and perhaps you will enjoy this recent letter from Ralph as much as I did.

Dear F. P.:

Thank you for your most kind and generous note.

Incident yesterday after filming near 91 outlet to 132. Florida car parked. Man with heavy camera tripod plus Nikon shooting for half hour piled up hay bales in field. After I finish my filming I walk over.

I see that you're thorough--you've been here a long time.

Yes, I use two different kinds of film and I bracket a lot by half stops.

How do you determine exposure?

I use Doescher's "COLOR ZONE SYSTEM".

What's that?

I use this meter; point it at the subject and then stop down $2/3$ of a stop more than the meter indicates.

What do you mean you point it at the subject?

Here (he hands me a 5 X 5 X 5 inch meter with a handle), look through it and push the button.

I do so, and as I move the spot around a wheel around the edge revolves clockwise or anticlockwise.

Unbelievable, but at exactly what do you point the 1 degree meter area?

Anything.

Anything!?! When I pointed it at a cloud the exposure indication went up; when I pointed it at the farmhouse it went down; when I pointed it at the shadow side of hay bale it went way down.

Oh, yes, we aren't supposed to point it at the sky or a cloud.

At what then?

Oh, anything except the sky, and we have to

remember to give 2/3 of a stop less.

Do your slides always "come out"?

Oh, yes!

Really?

Sure, I bracket like crazy around the meter indicati

MORAL: Thou shall't not take the name of St.
Ansel in vain. Or he should have stayed
in Florida, where he came from. Nothing
matters much in Florida.

So, get busy in preparation for next year's Picker
Zone VI. Take course at South Wood-(head) stock
School of Photog. in Color Zone. Then teach it.
But be damned sure you don't forget to stop down
2/3 of a stop and plenty of bracketttttttttting.

Yours for less idiocy,

R.S.

Ralph told me of an experience that he had
that is typical of an aspect of modern photography
that I feel is most destructive to creative growth.
First, his experience: Ralph is writing a
serious book explaining some photographic techniques
the action of light sensitive materials, etc. In
discussing enlarging, he contacted Kodak for their
suggestions or opinions relative to the handling of
films for condenser or cold light enlargement.
Ralph tells me they put three men on the question
for over a week and they came up with the following:

"A cold light enlargement will match a condenser enlargement if you use a grade of paper 1 1/2 grades softer for the condenser". In other words, there is no practical difference in the prints from the two light sources if paper grades are adjusted. (According to the lab engineers at Kodak.)

If they were photographers, the practical problem would have been so obvious that they could have saved all that time and curve drawing. The problem is simple: although a print made on, for example, #2 Polycontrast with a condenser might look much like a print made on #3 1/2 Polycontrast with a cold light, the prints would be of poor quality in both cases.

The reason is that a negative to be printed by contact or cold light on #3 1/2 paper must be so weak and thin that it is insufficiently exposed and/or developed to make a fine print with either light source. (There is no usable shadow detail in such a negative.) One of the important reasons for the excellence of contact prints and cold light enlargements is that a negative of sufficient exposure and development can be used. Such a negative is loaded with rich shadow detail and high value detail. These detailed high values are always blocked by condensers and the characteristic chalky look occurs.

One of the students at the recent workshop was Michael Coplan whose letterhead reads, "Institute for Fluid Dynamics and Applied Mathematics" of the University of Maryland. Here is a scientist who is also an outstanding photographer.

His letter clearly indicates the opposite conclusion drawn by a photographer from the same knowledge available to a scientist. (The set of curves Michael sent would have to be nearly identical to the ones made at Rochester). To save space, I won't include the curves as the written description is adequate to illustrate the point. The information on the carefully drawn curves indicates that the equipment used for the film density measurements (on easel) was an American Instrument Co. Photomultiplier Microphotometer used with a Besseler 23C with condensers as supplied and alternately with a Zone VI Coldlight head.

"Dear Fred:

Enclosed are the density curves about which we talked. The film was exposed in the following way: A gray card illuminated by a photoflood lamp was metered with a Weston Master V with a zone dial set at an ASA of 400. A Leica M2 with a Dual Range Summicron was used for exposures. The shutter speeds had been recently checked by Leitz. Eleven exposures were made on Tri X 135 film corresponding to Zones 0 to X using the Weston meter reading and the zone dial to calculate exposure. This was repeated three times. The four rolls were developed in D76 diluted 1:1 at 70°F for 5, 10, 15, and 20 minutes respectively.

Three sets of density curves were made from the four film strips. The first was made with a standard densitometer. The second and third sets were made with the film in the negative holder of a Besseler 23C enlarger with the sensor of a microphotometer measuring the transmitted light at

the base board of the enlarger. In one case the source of illumination was the stock condenser system of the enlarger. In the second case it was a cold light head purchased from Zone VI. I think that these latter two measurements are the most significant since the light measured at the baseboard of the enlarger is what the photographic paper responds to when one makes a print. Standard densitometer measurements are made under idealized conditions and are not easily related to exposure of photographic paper by an enlarger.

There are a number of obvious conclusions, which can be arrived at by looking at the curves. These are, of course, common knowledge to you.

1. Increased development time has almost no effect on the low densities in the negative while producing a large effect on the high densities.

2. The proper ASA for Tri X is 200 not 400 to get Zone I 0.1 above film base and fog.

3. The densitometer and cold light head curves are quite similar. In fact, the cold light head gives slightly lower density readings than the densitometer.

4. There is a great difference between the cold light and condenser curves at moderate development times. For example, at a develop-

ment time of 10 minutes there is almost a two zone difference in density between the two curves at the higher densities. A 10 minute developing time for a negative to be used with a cold light head corresponds to 7-7 1/2 minute development for the same negative if it is to be used with a condenser enlarger. Under these conditions, separation of the lower densities suffers.

These conclusions corroborate what you have always said. Since the same four film strips were used for each set of curves, direct comparison of the curves is valid. Variations in shutter speeds probably account for the erratic spacing of the curves. I've tried to average out the variations by drawing smooth lines which best fit the experimental points. The conclusions should be able to be applied to any developer used with Tri X since all that is being measured is film density. HC 110 B should give results which are qualitatively the same as the D76 data.

Perhaps this will be of some use to you.

Sincerely yours,

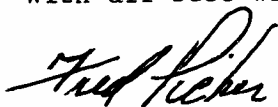
M.C.

The graphic difference in approach between the lab people and the photographer is found in the final third of Michael's second paragraph. It is interesting that what happens to the paper is the only thing that matters to a photographer. That

aspect is entirely ignored by the scientists!
The destructive aspect I mentioned earlier is
that many photographers are strongly influenced
by people who draw curves, test lenses on benches,
write columns in magazines, sell cameras in
stores, criticise serious work, but have never
made a serious photograph or a good print.

I am leaving August 13 on the long drive
to Nevada where I look forward to meeting some
of you at the workshop in Virginia City.

With all best wishes,

A handwritten signature in cursive script, appearing to read "Fred Picker". The signature is fluid and stylized, with a large loop at the end.

Fred Picker

ZONE VI Newsletter

Newsletter #9 12/75

A great improvement in presentation often occurs through a simple change in pace.

That, I think, is the essence of what I learned from my two workshops this past summer (one in Putney in July and the other with Oliver Gagliani in Virginia City, Nevada, in August).

Although I found the student work serious in intent, frequently poor technique attracted attention to itself, distracting the viewer from the image. Many photographers go too fast. When pictures are "snapped", sometimes at the rate of a hundred a day, the photographer is usually batting zero.

Here's a good slow-down exercise: take one camera, one lens, and one negative out for the day. Find a strong subject, carefully consider camera position, lighting (Is this the best time to photograph it or will the sun be in a better position later?), and placement of values (exposure). Write down placement of important values. Make your picture. Develop the negative and make a careful and precise "proper proof." Study it carefully.

Take time. Are the values where you envisioned them? Is the contrast the same in feeling as in the original scene? Are the shadows luminous (they should be if you placed them on Zone IV) or rich black (if you placed them on Zone 0 or I)? Are the high values delicately detailed or bleak and chalky from overexposure and/or overdevelopment? Is there a way to improve the composition? Stop here unless you are completely satisfied with the negative as it prints on the proof. Attempting to make a fine print from a poor negative is a frustrating, paper-wasting chore and nothing can be learned from the experience. Make a new negative, if refinement is indicated.

The changes you should make in camera placement, exposure, hour of the day relative to sun and shadow, or type of day relative to cloudy or sunny, will all be obvious from careful study of the proof and your shooting notes. So will an indicated increase or decrease in negative development time. Don't expect miracles; if you are photographing a low contrast subject, you will get a flat print. Perhaps you will decide the original subject wasn't worth the candle. Find another. Take time. Steichen, in the middle of a very successful professional career -- chief photographer for Vanity Fair or Vogue -- took off a full year. He spent it photographing a cup and saucer in order to learn more about light and sharpen his vision and

technique.

The object of the exercise is to make the very best negative, at least compositionally and technically, that the photographer is capable of. The rewards are startling for those who stick with it. Remember the one about the stranger to New York who, upon asking a gentlemen, "Can you tell me how to get to Carnegie Hall?" was answered: "Practice, young man, practice."

In the next issue I'll discuss some advanced procedures to the printing of a fine negative.

* * *

I have been getting quite a quantity of mail recently about Tri-X/HC 110 film-developer combination -- this from readers of The Fine Print. Most comments are negative. On the other hand, Zone VI readers (who have tested their film) love it. The difference is that tested developing times run about $3\frac{1}{2}$ minutes for condenser enlargement to $5\frac{1}{2}$ for cold lights. People who don't test, but instead follow Kodak instructions:

1. underexpose at least one stop
2. develop nine (9) minutes!

This procedure guarantees soot and chalk negatives of horrible graininess. Such a negative printed with either a condenser or a cold light will produce poor prints. Cold light cannot "save" a poor negative. It accurately reproduces the

diffuse densities of the negative exactly like a contact print. If you can make a fine contact print (proper proof) from a negative, that negative will make a fine enlargement with cold light.

If your tested development time gets too short for proper agitation, HC 110 can be diluted as much as 1-62. This is usually necessary if water temperatures are higher than 68°. (In 75° water at 1-31 dilution, development for condenser printing might be down to two minutes.)

Other complaints about HC 110 have to do with its use with other films. Not my fault. I only recommended it with Tri-X. I know it is awful with Pan-X and, in my opinion, nothing is any good with Plus-X. Ansel told me long ago that the bottom of the barrel is a Plus-X negative developed in D-76 and printed with a condenser enlarger. His opinion has stood the test of time; it's still the worst.

Sometimes I get a letter that asks, "Do you really like Tri-X HC 110 better than goofy pan 2,000 with sodium maple clam juice?" I always say, "I haven't tried it; send me a print." No one ever does. I haven't tried it because it takes a lot of time to try it and I'm satisfied with what I use. It has taken me years to really understand the way my materials act. To make a meaningful comparison between developers, I first make a development time

test for both, assuming I have already located personal film speed. I then expose two sheets (or an entire roll) to one subject -- a "normal" full-scale (sun and shade) situation with plenty of subtle high-value gradation. A landscape with clouds is a good tough test. I then develop each sheet for the tested time in its designated developer. Then I make prints and compare. Seeing the difference in the prints is really the only answer.

That, I think is the way to do it. I've run curves on the densitometer for various films. The curves sometimes appear almost identical, but one film developer combination has the subtleties of tone, "presence," and richness that I want and the other has not. The important thing is that only through controlled testing and print comparison of the same subject matter, lighting, etc., can a valid choice be made.

If you want to test two films, that's more work. You have to first test each for speed as well as development time (two 400 ASA films are not necessarily the same speed and are probably not 400 either.) Then proceed as above. It is a lot of work; it takes time, but it takes less time than years of haphazardly trying everything that the camera store fellow says is marvelous (this

week).

* * *

I've been working on a problem for quite some time that might be of interest to you. When making a book or planning an exhibit where the photos are from 4x5 negatives mixed with 35mm. negatives, the difference in quality is distracting. Both cameras are needed; the view camera for landscapes and architectural, the hand camera where speed of handling is necessary.

In an attempt to bridge the gap, I tried Pan-X in the 35 mm. and it was better than 35 mm. Tri-X in terms of grain and sharpness, but not as smooth in gradation. Then I thought I would try a bigger negative in a hand camera. I had a Pentax 6x7 that had spent the past year traveling around trying to get fixed. It ate batteries. (It has an electric shutter -- how did Weston or Strand ever take pictures without an electric shutter?) And when the battery (at \$3.00 per) is dead, you can't take a picture. No comment. Anyway, they finally changed its diodes or something and it works. I took it on a recent trip to Gaspé and with Pan-X (developed in X-22) it makes a negative $2\frac{1}{4} \times 2\frac{3}{4}$ that will make a print that you really can't tell from a 4x5 Tri-X print.

I made portraits and even a hurried landscape

in fast changing light. (I would have missed the landscape if I had taken the time to set up a tripod camera.) The print gradation is smoother than with the 35 mm. Pan-X and that's because of a difference in the film quality as well as a difference in the film size. (I checked one against the other at the same enlargement ratios). Anyway, the landscape, in an 11x14 print, is really comparable in quality to a 4x5 Tri-X print of the same size. (If you think Pentax is subsidizing this, you're wrong. Proof is, I only have one lens!)

In spite of its handiness compared to a tripod camera, it cannot substitute for a view camera where controls (rising front, swings and tilts) are needed to increase depth of field. Nor can it correct distortions like converging verticals. It is not quite as quick or handy as a 35 mm. camera, but used as described, it makes very fine print quality possible with a hand-held camera.

A Hasselblad, RB 67, Bronica or Rollei, though the negative is smaller, would probably do about as good a job, but I have trouble handling these cube-shaped cameras. The Pentax 6x7 looks like a giant Nikon, so I'm used to the shape, if not the bulk and weight.

The comparatively slow speed of Pan-X was not a problem. Sunlight exposures of 1/125 second at F/8 were normal; the usual $2\frac{1}{2}$ stops more for open shade--

1/60 at F/4 - 5.6 was still okay, though there wasn't much depth of field. But that open shade set-up was only used for portraits where great depth isn't necessary. The weight of the camera steadies it and I've had good results at 1/30 of a second, especially if I can find something to lean against.

In any event, I have a secret weapon. I bought a leather hand strap with a tripod screw on it and tied four feet of clothesline to the leather handle. By stepping on a loop tied in the end of the rope and pulling up on the camera, I can really steady it.

In my next letter I will explain the reasons for my not recommending Pan-X or other slow films for large format cameras.

1975 was quite a year for Zone VI. As a result of your interest every segment of the business grew in healthy fashion. 1976 will bring you new products through an expanded manufacturing facility, as well as a fuller workshop schedule. I'll keep you informed. The workshop schedule will be sent to you in February.

Best wishes for a happy holiday and peace through the coming year.

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text.

ZONE VI Newsletter

NEWSLETTER #10 and #11
Double Issue
April, 1976

Before we jump into photography, I would like to briefly congratulate two young local people on outstanding performances. Billy Koch, a recent graduate of The Putney School, startled the skiing world by finishing second in the Olympic 30 kilometer cross country race. The best previous performance of an American in Olympic cross country had been a fifteenth place at Lake Placid 44 years ago. When a gushing T.V. reporter asked him, "Have you lived in Vermont all your life?" Billy devastated him with the classic, "not yet." Martha Rockwell, another Putney graduate, took a second place in the Swedish cross country championships in Avesta.

Sliding back toward photography, but with another congratulation, this morning I received the first copies of "Ghana: An African Portrait" with photographs by Paul Strand. It is my opinion that a photographer ignorant of the works of Strand is kin to a musician innocent of Bach. And this latest Strand is glorious.

The last newsletter discussed negative making and stated that prints from a smaller format using slow film could match the quality of prints made from larger negatives made on fast film. The negatives compared were 4x5 Tri-X film exposed in a view camera, and $2\frac{1}{4}$ by $2\frac{3}{4}$ Pan-X film exposed in a hand held camera. The newsletter stimulated a lot of people to write. They had recently purchased view cameras and were concerned that they had made an error. I don't think that they did. Each camera has attributes as well as drawbacks.

The hand held camera is superior for portraits in some situations. These include an active or impatient subject, or a subject you wish to photograph in an informal way. If the subject is placed in open shade, which is my favorite portrait lighting, the slow film, such as Pan X, will require an exposure of about F/4 at the dangerously slow speed of 1/15 second. At f/4 and a five foot camera-to-subject distance, the depth of sharp focus will extend only from the tip of the subject's nose to his ear if you focus on his near eye. Portraits can be made under these conditions, but there is considerable danger of subject and/or camera movement, and the focus must be very precise. Leaning your head or the camera on something solid will help as will a cord tied to the

camera and stepped on as it is stretched upward. The cord allows sufficient mobility to make minor adjustments in camera position.

Another instance where the hand camera comes into its own is in any fast breaking situation where there is no time to set up a tripod. This quite often happens in landscape, although that is generally conceded to be the tripod's domain. Movement of clouds or animals or changing light often dictates fast action on the photographer's part. If great depth of field is required, there may be a problem; even in strong sunlight, Pan X will require $1/30$ sec. at $f/16$ (or $1/15$ sec. at $f/22$).

To sum up, the hand held camera with slow film is fine where speed of handling is required, and great dept of field is not needed. The tripod-mounted technical camera is ideal where great depth of sharp focus and correction of horizontal or vertical distortions are needed.

Why not use slow film in the view camera for even better results? I believe that for field work a slow film would be a detriment because even with a fast film, exposures get quite long when the lens is stopped down for great depth of field. For example, a common exposure for a bright day would be $\frac{1}{4}$ of a second at $f/64$ using Tri-X. Adding even a mild filter, such as a K-2 medium yellow, would dictate a $\frac{1}{2}$ second exposure. That is slow enough, but a slow film would need about three or four

seconds (including allowance for reciprocity departure for exposures over one second).

Three or four seconds feels like a decade when you are making a portrait. It is an impossibly long exposure time for woods, clouds, or water if there is any breeze blowing. People and animals are in seemingly constant motion.

In spite of what you might have read, there is no condition of natural light where Tri-X is too fast to be properly exposed. On painfully brilliant snowfields in Iceland, the shortest exposures with a mild filter were 1/60 second at f/32. (1/125 at F/22). This is four stops more, including one stop for the filter, than an inexperienced photographer would give. An inexperienced photographer would place the snow where the meter needle dictates (Zone V) and that would mandate an exposure of 1/1000 at f/32 (assuming no allowance for a filter). No camera has both a 1/1000 speed and such small f/stops, so it is assumed the film can not be used. I've seen this incorrect explanation a half dozen times in the photo magazines.

Panatomic X is no longer made in sheet film size, but other manufacturers make slow fine grain film for large format cameras. Such film might have attributes in studios for still life, with powerful lights, and in other controllable situations.

The tonal quality of a print from a slow fine grain negative has a different appearance than a print made from Tri-X film. This is very noticeable if the subject is full scale. The fine grain image will be rather "jumpy" looking and tones will not blend as smoothly. This difference will be less noticeable in low contrast subjects such as portraits in shade, and slow film may actually improve such pictures because of its propensity for separation of close tonal values. To see the effect exactly, photograph a long scale (high contrast: sun and shade situation) and a short scale (all sun or all shade) subject with both films and compare the resulting prints.

I have had a terrible time writing this next section. I wanted to take up where the last Newsletter left off and go into the description of the making of a print. I've written it three times and it is no good. I think that I have finally figured out why. I have been trying to describe a process that must be instinctual in specific terms. It is like writing an article on how to conduct a symphony.

Good printmakers (good photographers) are good seers. A person who can't see can't photograph, and can't print either. I will try to explain.

Some time ago a photographer came by to watch me print. I started out by making a test strip on normal #2 paper for a contact print from an 8x10 negative. The subject was a snow scene in bright sun with some strong tree shadows, a dark bit of brook with bright ice around the rim, and dark woods in the background. The 24 second exposure strip showed the sunlit snow gleaming and brilliant - just as it had impressed me when I made the photograph. The delicate detail that you can just barely discern in fresh snow on a bright day was present. There was the feeling of volume and substance and shimmering light. At 24 seconds it was snow. I don't know how else to say it. I asked him which exposure he favored. He chose the 30 second exposure. The sunlit snow in that strip was between print values V and V1, the shadowed snow was about a Zone 111 print value. I was curious to see where he would go from there and thought I might learn something about teaching, so I made a print his way. A 30 second exposure and a two minute development gave us a very gray muddy print. He thought it was pretty dead and suggested a higher contrast paper. I made a new test strip, and then a print matching the general tones of the previous effort. This time I used grade 3 paper. He thought it was "snappier". Finally I showed him that

we had gotten off on the wrong foot at the outset, and there was no way we could get things right starting off with a 30 second exposure time. At about that point it finally struck me that I have been wrong and so have other photographic writers in assuming that printing difficulties will take care of themselves through increased care, effort, better materials, and dedication. The real problem people have is the ability to see photographically. No matter how much time, effort, and paper this fellow would use, he would never get the snow to look like snow until he learns what snow looks (feels?) like in the woods and should look like in a print. Obvious, isn't it?

When Strand or Adams or Caponigro spend hours or days printing a negative they are following a linear path to the end. They know where they want to go, they visualize the print without getting sidetracked, and finally they produce. Good photographers are almost always good printers. Exceptions are photojournalists who are completely involved in the event and whose work is only seen in newspaper reproduction anyway.

I once read an assinine review of a very beautiful Paul Caponigro show. The headline read, "Making Jewels out of Jewels" and the reviewer stated that, "Caponigro is fighting a battle between technique and esthetics."

Why? Because "the prints are so beautiful that he must be over-involved with technique."

Nonsense: The truth is that no photographer is a better or worse printer than he is a photographer. The same ability to see photographically comes into play in the darkroom as existed in the field at the time the photograph was made.

Back to the snow scene and my friend. This is what I did next. I turned off the lights in the darkroom and we adjourned to my living-room where I started going over prints with him. I concentrated on just showing him various subjects and tonal values that seemed appropriate. He quickly caught on to relationships and after a while he began to understand that the tone of an object can be "correct" in one photograph and wrong in another depending on what other tones are present. For example, white painted wood on a cloudy day is emotionally "white" even though it is "in shadow", but shaded white painted wood on a sunny day seems to be of a realistic tonality if it is a middle gray. The reason is that the white wood in sun that appears in the second print is the substance that, in that picture, must be white. In life, and in the print.

The relationship of tones changes the emotional effect of each tone. In The Fine Print there is a picture called "Searsport, Maine" where the distant houses appear extremely white

because the water in front of them has been printed dark. In the straight print where the water has not been darkened, the houses are exactly as white, but you would not believe this in looking at the two prints. The houses look even whiter than the print borders in the second print. It is all relative. This emotional difference is very graphically seen in the Zone VI Workshop portrait of the young lady wearing a black shirt and seated in front of a dark background. Her Zone VI face looks like Zone VIII because of the black area around it.

We studied a lot of prints together. This fellow was addicted to gadgets and was constantly trying to apply what he was seeing so that he could adapt his printing meter analyzer toy to making prints. He was trying to make it work in Zones. Now a "Zone" in a print is about as precise as an octave in music. There may be about fifty "notes" of gradation in Zone VIII, assuming a cold light print on a sensitive paper from a properly exposed and developed negative of long scale subject matter. You could have all of the "right" zones and make a very gross print.

There is no way that any equipment is going to substitute for the talent and sensitivity and common sense that photography or any other expressive medium requires. I think that what

photographers often need is plain confidence in themselves. Perhaps we are so used to the machines and "experts" of this age that we have lost belief in our own ability to make decisions. We ask the machine. I just bought a used Red Dot Artar f/11 19 inch lens for the 8 x 10. (A new one is \$1,100.00) The fellow who sold it to me on approval - the only way - said it had been checked out on an optical bench and he would include the test results. I told him not to bother as I had no intention of using it on an optical bench. I know from experience that if a lens can photograph distant twigs and branches sharply against the sky without having them break up into fragments in the print, it is sharp, has no big flare problems, and has passed the most difficult test of resolving power that I have ever put a lens to. One photograph of that situation was all I needed to show the lens was tack sharp. Suppose the bench test had shown the lens was fine but in the field the branches and twigs fell apart? The moral is plain: find out what a thing actually does; not what someone says it does. Want to know if a certain Nikon is capable of making a better negative than a certain Leica? Put them on tripods side by side and make simultaneous photographs at the same speeds, apertures, focus - same everything. Develop the films together and

print the negatives side by side (in a glass $2\frac{1}{4}$ or 4x5 negative carrier). You will know.

One more lens test is needed and for that you don't even have to make an exposure if you are using a ground glass back (view) camera. Just set up in front of some geometrical pattern such as a building with a row of windows or a solid brick wall. The camera must be level and parallel to the wall. If the brick lines seem to curve and are not precisely parallel to the edges of the ground glass, the lens has barrel or pincushion distortion or aberrations or something. I don't know what any of those things mean, but I know I don't want a lens that photographs straight lines as curves. This test will only work with a view camera; if you have a hand camera you must take the picture and see if the bricks or windows are parallel to the print edges. If the lens passes these two tests, it is sharp and doesn't distort. End of lens test.

Trust your eyes. Do you know that Residue Coated Polycontrastless Rubber is the biggest selling paper? The buyers don't know the difference though a sensitive photographer will get nauseated (no exaggeration) at the look and feel of it. To make a good print on material of that quality is impossible. No sensitive photographer would try. Michelangelo didn't attempt to carve "David" out of a hay bale!

It's great to have your own Newsletter. If I wrote this for a magazine or book publisher, it would never see the light of day. They always want you to compliment the advertisers and make it easy, not hard. But it is hard, isn't it? Ansel Adams said that 12 photographs a year that mean something is good production. Damn good. I haven't got solutions, but here are some observations of photographers that you might find have application. I am going to quote a letter from Charlie Baggett who came to my workshop last summer. Charlie is a professional from Columbia, Maryland and a fine photographer, getting finer. He is coming back this June. He says, "I have your 3 prints in my darkroom because they are of the most benefit to me there. What a fantastic bargain they are. Since the workshop I am convinced that the only way to "see" better is to look at well executed prints ... All efforts to convince them (other photographers) of the value of owning fine prints have come to naught. They won't pay \$15.00 for a fine print but I can convince them to buy a 20 mm Nikkor lens for \$230.00 in less than 15 minutes. I feel sorry for them. They will never produce a print of which they can be truly proud."

That sounded like a commercial, but it wasn't meant that way. Charlie is telling the truth. I learned to print with Ansel's "Tenaya Lake" and "Oak Tree in Snowstorm" by my side.

Here's another letter. The letter is from Mark Schlachter who attended the same workshop that Charlie did. He and Rosemary and a new addition; Abby, will be back this August. "I feel a tremendous debt to you and the Zone VI Workshop for the success of the exhibition (at The Cincinatti Art Museam). My work has progressed farther in the last year than it had in the previous five or so. I could not have put the show together without your help. In the last few months I have been exposed to a lot of locally produced photography and am convinced to the point of religious certainty of a number of things:

- A. One hell of a lot of people shoot better with their mouths than with their cameras.
- B. You can't buy your way to visual success and aesthetic nirvanah (clothes may make the man but hardware does not make the photographer).
- C. Technique isn't everything, but without it you haven't anything".

Mark is a professional working in advertising photography. He makes time to do personal work and this recent show was well accepted critically and in number of prints sold. About half the prints were sold and that is very good indeed. Mark's impressive progress is due to exposure to good work and his own effort. He is seeing more sensitively. He is "stretching." The ability to see photographically can only be learned over a period of time. Some people learn more quickly than others, but there are no child prodigies

in photography. It takes time and exposure to fine work. Some photographers waste a lifetime re-inventing the wheel. It has been done and done exquisitely. Go to museums and galleries and see the prints of the masters, take advantage of their expenditures of time and effort and talent. Buy books, buy prints. There is no such thing as a good photographer who doesn't collect photographs and see exhibits any more than there exists a good musician who never buys a recording or goes to a concert or a writer who doesn't read.

I can tell what kind of a photographer a person is, or may become, just by the way he picks up a print; (by the edges, carefully, and using both hands) and by the way he looks at it; (long and with his mouth closed). If, on the other hand, his thumbs are all over the mount, the shadow from his head is falling half over the image, if he is in poor light and doesn't know or care or bother to move; if he can't wait to ask you, "What lens" (camera, paper, etc.?) pack up your work.

Try to find some person to show your work to from time to time, someone to keep you or get you on the track, tell you what is happening in your work that you may not be aware of, make you think, work, see in more concise ways. Find someone whose photographs move you emotionally. There can be no other criteria. Stay well away from critics and

gallery owners and photo editors. If they could see, they would photograph.

This Newsletter would have been easier to write- and to read- if I had described how to make a test strip and how long to develop it, etc. but we all really know that. We can each make a test strip as well as Strand; you just move the card an inch at a time exposing for a few seconds between moves. That's all that Strand does. But then.....he picks the right strip and he chooses the paper that will (in his experience) enhance the character of the particular image, and he will know what longer or shorter development time or a different developer or dilution will do with that paper and he will force his materials to make the print he has envisioned from the start. And not one movement of hand with the dodger, or inserting the print in the developer, or agitating it will he perform one wit better than you or I; the difference is all in the seeing, the knowledge of and respect for the materials and a genuine love and understanding of the object that was before his lens. He brings it to life in silver. And we can all do the same in accordance with our own gifts, but a raising of sights is needed. Today's photographic community is working against those who would do serious work. We are in an age of mediocrity in every field from political leaders to 18 billion cardboard hamburgers. Photo

literature and the new name photographers are involved with the new, the tricky, and the shocking. I am tireder than I thought I could be of the myriad pubic profundities; the excruciating boredom of the repetitive and obvious "sequences", the endless bad taste and the lousy craftsmanship. Ahh wilderness.

Photography will withstand it. On my walls live photographs by Strand and Caponigro and Weston (s) and Adams and Clift and a clean cool breath seems to emanate from them and they constantly change for me as new relationships are found within the images. True photographs are very beautiful and those who refuse to align themselves with the fashionable but find a home in their own world will, with conviction and commitment and a certain innocence and sense of wonder sooner or later produce work of beauty and merit.

Paul Strand is dead. I just now received a call from Lillian Farber saying that he had died in Orgeval, France, yesterday. He was 85 years old. He had been ailing for some time but the last time I saw him - less than a year ago - he was bright and cheerful and funny as always, in spite of being in some pain. I was with Lillian and we were at his apartment in New York. He wasn't well and Mrs. Strand asked us to stay only a few minutes. We started to talk and he insisted we stay on. We stayed three hours, asking every few minutes

if it was alright. We talked about so many things that meant so much to him; people he had known, painting and painters, photographers, making a book, the philosophy of approach he had to photographing foreign lands and people, music and craftsmanship. Lillian asked him if he still felt that "color and photography have nothing in common".

With a twinkle in his eye he replied, "I still feel that way, but today I would say it a little less abruptly. It's a dye; it has no body or texture or density as paint does." He talked lovingly or furiously about materials, about "paperiness", about his good 8x10 Deardorff and "new" 5x7 Graflex, and said, I just don't like that little 35 millimeter image." He loved the materials of the medium and he was elegant in his language. He would say, "make the exposure" or "expose a negative", never "shoot"- never. Nor would he "soup" a negative. One, two, three days to make a print. It didn't matter. The print mattered. He despised mediocrity in craft, and he loved fine photographs and said so. No cast iron Guru he; when he got excited about a print, he would cry out in delight. I remember showing him an Easter Island Landscape and he said quietly, "lovely, lovely" and then "Oh Hazel, come here and look at the horse!" He thought that photography had to take a back seat to no medium, but he respected

very few photographers. These included, as well as I can remember; Walker Evans, Manuel Alvarez Bravo, Cartier Bresson, Dorothea Lange, D.O. Hill, Curtis, Brady, and I think Brassai. He said that a true photograph was as fine as a true painting and there was no reason why a photograph could not share a wall with a Rembrandt drawing and hold its own. If it could not, it was not that photography had a problem, the photographer did. He wrote in my copy of his monograph, "To Fred Picker, colleague in the art of photography." When we finally left I remember saying to Lillian that there is no person I could think of who I would rather have known. We knew we would not see him again.

I can't write any more. Nor have I the heart to go back over any of what I have written to edit it. I hope you will excuse its roughness. I would like to quote Strand and others.

Stieglitz said of him, "His work is rooted in the best tradition of photography. His vision is potential. His work is pure. It is direct. It does not rely on tricks of process." Hilton Kramer called him "both a historic figure and a great artist." In reviewing the retrospective show in New York four years ago, Kramer said, "There is a strong element in Strand photographs of

sympathetic identification with the subject matter, but the overriding impulse is toward esthetic refinement. The result is a formal purity that is breathtaking."

In 1917 Strand wrote in Seven Arts, "The full potential power of every medium is dependent upon the purity of its use, and all attempts at mixture end in dead things. It is this very lack of understanding and respect for their material, on the part of photographers themselves which directly accounts for the consequent lack of respect on the part of the intelligent public and the notion that photography is but a poor excuse for an inability to do anything else.

The photographer's problem therefore, is to see clearly the limitations and at the same time the potential qualities of his medium, for it is precisely here that honesty, no less than intensity of vision, is the prerequisite of a living expression. This means a real respect for the thing in front of him, expressed in terms of chiaroscuro (color and photography having nothing in common) through a range of almost infinite tonal values which lie beyond the skill of the human hand. The fullest realization of this is accomplished without tricks of process or manipulation, through the use of straight photographic methods. It is in the organization of this objectivity that the photographer's point of view toward Life enters in,

and where a formal conception born of the emotions, the intellect, or of both, is as inevitably necessary for him, before an exposure is made, as for the painter, before he puts brush to canvas. The objects may be organized to express the causes of which they are the effects, or they may be used as abstract forms, to create an emotion unrelated to the objectivity as such. This organization is evolved by movement of the camera in relation to the objects themselves or through their actual arrangement, but here, as in everything, the expression is simply the measure of a vision, shallow or profound as the case may be. Photography is only a new road from a different direction but moving toward the common goal, which is Life."

"It is absurd to think that the only way to tell if a poem is lasting is to wait and see if it lasts. The right reader of a good poem can tell the moment it strikes him that he has taken an immortal wound - that he will never get over it."

Robert Frost, May 16, 1925

ZONE VI Newsletter

NEWSLETTER #12
October 1976

"The lyf so short, the craft so
long to lerne." (Chaucer, The
Parliament of Fowls, 1380-1386)

This summer was busy with two ten day workshops at our new facility at Putney School. Everything went smoothly except that during the June workshop the newly built 16 foot print darkroom sink sprang a leak. The sink was plywood with fiberglass covering, but the builder had mixed the catalyst incorrectly and the fiberglass bubbled.

If you are thinking of building a darkroom sink, here is what we did after the June workshop. The new sink was built with 16 foot 2x8's for sides. These were notched 3/4", and weatherproof plywood was set in with waterproof glue and clamped. Then two thin coats of epoxy paint were applied inside and out, and we had no further problems.

With two sheet film labs, a large roll film lab, and our ten-enlarger print darkroom plus my home darkroom (for demonstrations), there was general agreement that no finer community photographic facilities exist. Our display set-up is outstanding. We have an airy 60 foot long gallery with excellent lighting and 240 lineal feet of hanging space.

There were 50 people at each workshop, and no one was crowded or hurried.

Everyone learns a lot at a workshop including the instructors. What got reinforced for me as I taught and observed our students was one universal value described by Darrel Rush from Salem, Illinois. He wrote:

As I think about what I valued about the workshop, I feel that what I will profit from most is your constant stressing of the need to simplify everything. I feel that my photography cannot help but improve if I can sustain a conscious effort to simplify my equipment, technique and vision.

Most photographers have too much of everything. Too many films for instance. Often I receive Tri-X, Plus-X and Pan-X films from the same person for a densitometer test. Plus-X is a harsh, slow film. It is only $\frac{1}{2}$ stop faster than Pan-X. No one has ever showed me (in a print) any reason for using it.

Too many papers. Many photographers jump from this paper to that, proofing (?) on one, printing on another, looking for bargains. The print is what photography is all about! Buy paper --lots of paper--use paper, and forget the cost. Don't buy junk. People at the workshop were trying to find the minimum time for maximum black for proper proofing on polycontrast. It's a waste of time. There is no black in it. Buy Ilfobrom. It is (by far) the very best paper available. Throw out everything else and really learn how one good product works if you want to improve your prints.

My assistant, Lil Farber, who has been photographing sporadically for only three years hung a

dozen prints at the workshop that were superior to those shown by all but perhaps 3 or 4 of the 100 students. She has a great eye, and this is her equipment: one $2\frac{1}{4}$ camera with 1 lens; a Besler 23C enlarger with a cold light head. She uses Tri-X film and HC 110 developer only. One brand of paper in one size (8x10) is all she has ever used. Dektol is all she has ever used. She "follows the book" (Zone VI) exactly. She knows her film speed and development time, and makes "proper proofs." She knows her equipment and materials intimately, uses the best, and is completely consistent. She has never become involved in the endless technical experimentation in which some professionals with 20 years experience are still entangled. She is a photographer.

Know your camera. The only reason to use a 35mm is because it is fast handling. If that is your format, practice until you can maximize its virtue. Can you set $1/125$ at $f/11$ fast without looking at the controls? Can you focus your lens to 8 or 15 feet fast without looking at the controls or through the range finder? Practice is equally important with larger size cameras. How fast can you get a 4x5 or 8x10 out of the car, on a tripod, focused, loaded, meter a scene and expose? A good man with an 8x10 will press an average 35mm user pretty hard. An 8x10 is not generally thought of as a speed camera, but if you are slow, you'll lose pictures.

Get good; here's how. Practice. Every artist must practice his technique, the dancer spends hours each day at the bar, the singer practices scales. A violinist knows where "G" is. Do you know which direction to turn the lens to focus closer? Which way do you turn the knob to halve (or double) the shutter speed? Clockwise opens the aperture? Are you sure? Is fifteen foot focus a quarter or half turn of the focusing ring from infinity?

Which direction? A fast camera in slow hands is silly.

Can you stand behind a tripod, mount a view camera, level up front to back and left to right, get the bellows racked out close to the proper focus, open the shutter and the aperture by feel, all in 20 seconds? I can. Here's how you can. Do it fifty times in a row. Not three times--fifty. Spend two hours. It beats fumbling for the rest of your life.

Simplify. How many lenses do you carry that you never use? I learned a rather obvious thing this summer. One afternoon I took 8 students into Putney village and then out to a stream for some field work. In town the 35mm users were all using long lenses--over 100mm. None of them were photographing people, but were more interested in details of architecture and other stationery subject matter. The long lenses were keeping them away (physically) from the subjects. Pictures made that way lack any feeling of presence--everything looks like it is behind a glass wall twenty feet away. "Use a moderate lens and get in close. Good. Now take three steps forward." My staff agrees that ninety percent of the work they see on contact sheets would be far stronger if the above advice were followed.

Then we went to the stream near my house where there is beautiful water carved rock, bright clear pools, and bubbling falls. Scrambling about, I found a lovely combination of moving and still water with reflections of bright sky and dark rock. I asked the fellow near me to hand me his camera. I aimed it at my "subject" and was startled to see my feet at the bottom of the frame and in the upper half of the frame the sky. Somewhere in all that mess was my "picture!" That super wide angle lens was preempting the proper rights and duties

of the photographer. A photographer is a seer--a segregator--whose job it is to find the essence (unusual or typical) of the object he is photographing and present it in the context he chooses. Photographs by their nature are quotes out of context. Here, in as damaging a way as the distant telephoto isolation, the wide angle all inclusion removes the photographer's control.

I have my 35mm kit finally in order. An old meterless Nikon F with a 105mm lens for portraits and other photographs of people. A Leica M-2 with a 35mm lens for commercial and travel color slides. That's all, and it's enough. The range finder focuses the short lens easier than a reflex will, especially in bad light. The reflex focuses the long lens better, and for portraits at $4\frac{1}{2}$ feet (the close limit for distortion free portraits with any camera or lens) it is best to see exactly what, and from what angle, you are getting. To do that, you have to look through the lens so the refl is best.

Two cameras carrying different lenses are faster than one camera on which you change lenses back and forth. Other advantages: if one breaks, I still have the Leica, I have twice as much film ready, I don't need a gadget bag. Just pockets full of film and a meter. That's what 35mm is about. Light and fast handling. Keep it simple. Don't worry about the lens in the middle that seems to be missing. One step back with the long one or one step up with the short one does the same job.

The Calumet camera people have kindly offered to lend me a camera with any lenses and accessories I would like to try. It is a "Horseman" which looks a bit like a baby Speed Graphic. It is a hand holdable range finder camera making a $2\frac{1}{4}$ by $2\frac{3}{4}$ or $2\frac{1}{4}$ by $3\frac{1}{4}$ negative on 120 film. Alternately, it can be used on a tripod, and with ground glass viewing

and swings and tilts, it acts like a view camera. The two different image sizes are obtained by a choice between two available roll film backs.

I requested a 75mm lens and a 150mm lens. The 75 mm is slightly wide angle for this format and the 150mm is slightly long. I will use four $2\frac{1}{4} \times 3\frac{1}{4}$ backs. (That negative is about as large as a $2\frac{1}{4}$ square plus two 35mm negatives). Two backs will be for Pan-X and two for Tri-X. I figure that, in general, the Pan-X, 75mm lens, ground glass back and tripod setup should be fine for architectural and landscape use. The 150mm lens, range finder, and Tri-X combination should work well for hand held portraits. This camera, I think, will be far less breakable and far more versatile than the 6X7 Pentax which broke again last summer.

I'll give it a good test in Vermont, and if it is all I hope it is, I'll take it to Yucatan this winter and leave the clumsier, non-holdable 4x5 at home. The big advantages of the Horseman include: the amount of film you can easily carry--5 eight exposure rolls of 120 take up about as much space and weight as one 4x5 (2 exposures) holder. Best of all, you don't have to find or build a clean dark place to load film every other night. The $2\frac{1}{4} \times 3\frac{1}{4}$ Pan-X negatives (see NEWSLETTER #10) developed in Rodinal will provide print quality equal to that provided by 4x5 Tri-X negatives.

There may be several disadvantages in use with the $2\frac{1}{4}$ Horseman as compared to the 4X5. The smaller groundglass will be more difficult to focus and compose on, but I hope to solve that problem through the purchase of a very strong pair of magnifying eye glasses. They will have a viewing distance of no more than three inches so that I can see what is or is not in focus as I stop down. Cameras of this type usually are more limited in the extremes of movements than a monorail technical camera. Whether or not this will pose a practical problem in field use can only be determined after actual use.

In those instances where Tri-X will have to be used because of the need for a faster film, print quality will, naturally, not be as good as with 4X5 Tri-X negatives. But since I anticipate using Tri-X mainly for portraits - and I always print portraits smaller than 8X10 - the quality difference should be negligible.

So far all is hope and conjecture, but I'll let you know in the next Newsletter what actually happens. That's all that counts.

Someday I'll expand and revise the Zone VI Workshop. It is necessary because materials keep changing or are discontinued, readers keep coming up with good new ideas on how to teach more clearly, and you find that material presented in a way that is easily understood by some readers, who might have a background in art history or music, is a mystery to those whose orientation is engineering or medicine. One concept that the engineering types have a problem with is the "minimum enlarging (or contact printing) exposure that will produce maximum black through the clear film edge". The recurring error here is always the result of overprinting. I have even had correspondence from people who have resorted to a reflection densitometer to find "maximum black". They don't understand the whole idea, which is to print to a useable photographic black. Overprinting would make a good negative look too dark on a proof sheet and cause a person to overdevelop his film in a Zone VIII development time test. When someone writes that he or she is developing Tri-X in HC 110 for ten minutes I know that either:

1. The ASA rating he is using is too high.
2. He is using a weak paper.
3. He is overprinting for maximum black.

Perhaps the best way to say it when the book is revised would be, "if you have the slightest doubt as to which stripe has the minimum exposure for maximum black, use the lighter of the two."

Describing Zone V111 is just as difficult as describing the black. Unfortunately you can't give very accurate examples in a book because the paper is different and ink is not silver. The Kodak step tablet is percentage grays and does not relate to the various Zones-print values- at all. It happens that the line up in the foreward of The Fine Print is exactly the correct tones for the various print values relative to paper base and the black of the ink. Good press work and plenty of luck. Just make sure that the Zone V111 exposure is a clearly noticeable but extremely pale tone barely darker than the paper base. Newsletter subscribers in doubt may send in their test along with a self addressed return envelope and I'll indicate the tone I would regard as a print value V111. This offer is good until midnight December 25th, 1976.

In the next Newsletter I will describe an excellent way to get infinite grades of contrast from graded papers. The method used with Ilfobrom will give far more range of "paper grades" than was ever available from even the best variable contrast papers. There is also a method of approach to printing that makes choice of the correct paper grade extremely simple and methodical. We will cover that also.

The Iceland Portfolio is currently at the printers and of the 1,000 copies, the publishers have told me that over half have been sold in advance. If you would be interested in seeing a descriptive brochure containing the 16 photographs, please send a dollar. The brochure will be mailed out on Nov. 15. The Portfolio will sell for \$75.00 and should be quite a work of printer's art. Chip Benson made the half tone negatives and the 300 line screen double impression lithography on 100 lb. Warrens Lustro is by Meriden Gravure. The overall size is 14X17 and the reproductions range from 6X8 to nearly 11X14. Ben Maddow, Edward Weston's biographer, wrote a beautiful introduction describing the photography of landscape and its history. The edition will be numbered and signed.

ZONE VI Newsletter

NEWSLETTER #13

January 1977

In the last Newsletter I mentioned the imminent arrival of a camera for which I had high hopes. The camera was a "Horseman" with 75mm and 105mm lenses and 2-1/4 x 2-3/4 roll film backs. I was hoping for a hand-holdable camera of good negative size for portraits that could, with swings and tilts and ground glass focusing, also be used as a view camera on a tripod. It would be perfect for a trip to Mexico that is forthcoming.

The camera arrived at the Post Office on a day I was going meandering with my 8 x 10 anyway. I had some 120 film in the car and I put the Horseman together and took it along. I exposed a roll (8 exposures) of film during the day. I used both lenses, hand held each exposure, and focused with the rangefinder. All parts of all pictures were blurry. Nothing was in focus. Was it the camera's fault or mine? A shaky hand, a goofy eye, an inaccurate rangefinder, or perhaps an unrealistic criteria resulting in an unfair comparison? Ninety percent of my pictures this past year are from 8 x 10 negatives so perhaps I was expecting too much.

Ask a Vermonter, "How's your wife?" and he'll probably reply, "Compared to what?" I decided to do what I should have done in the first place -- set up a fair comparison with real controls.

I set up the Horseman on the big tripod used for my 8 x 10 and photographed the pasture wall, maple trees, and distant ridge that comprise the vista behind my house. The stone wall and row of

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maples are 150 feet away from the house, so everything was at infinity or so close to it that slight stopping down would render everything in focus. I started with the 105mm lens and slid the front out to the infinity stop for that lens. I then checked the ground glass and found that "infinity" didn't agree with the infinity stop. The stops are little lugs. It would be simple to install them accurately at the factory by focusing a distant object sharply on the ground glass and then screwing down the stops along the track where they belong. I guess they place them by machine at the factory. Reminds me of why almost every half-tone illustration in books or magazines is out of focus; the operator of the camera focuses according to the manufacturer's marks on the camera instead of focusing on the ground glass. The marks are always wrong. The same thing is true of autofocus enlargers. They are always out of focus---automatically.

I folded the misleading infinity stops out of the way so I could focus the tree branches sharply on the ground glass. I used a powerful dentist's magnifier that Bud Schaler, who attended last summer's workshop, kindly sent me. It is great for the purpose and fits right over your reading glasses. When the tree branches were tack sharp on the ground glass, I looked through the rangefinder and it showed the tree out of focus! The rangefinder, the infinity stops, and the ground glass all disagreed with each other. But the ground glass shows the truth so I used that for my test.

I made an exposure, 1/30 sec. at f/16, then swapped lenses and went through the same routine for the 150mm. It too showed disagreement between the infinity stop, the ground glass, and the rangefinder. (You can't make a judgement error with the rangefinder as it is like a split image; one branch becomes two when it is out of focus.) I made the same exposure; 1/30 at f/16, focusing on the ground glass. Then as a control, I set up the 6 x 7 Pentax and made an exposure -- same scene, same exposure, same everything. I developed both rolls of

Tri-X together and printed the frame from each Horseman lens together with the Pentax negative in a glass carrier. Not only were the Horseman negatives unsharp, they were a whole paper grade weaker in contrast. (Both films were developed together.) I carefully packed the Horseman and sent it back to the folks in N.Y.

It had to be the two lenses that were at fault and not the camera. I operated the camera like a view camera, focusing on the ground glass. A slight focusing error is possible of course, but unlikely since I'm used to ground glass focusing and with the nearest object 150 feet away and a lens stopped down to f/16, everything would surely be sharp unless there was a vast focusing error. There wasn't; I was extremely careful with both lenses and both lenses showed the same poor results. There was no wind and all tilts and swings were zeroed.

I expect I'll get mail from Horseman owners who like them. Remember: "Compared to what?" Try yours out first against a Hasselblad with the mirror locked up, a 6 x 7 Pentax, Mamiya RB, etc. first. If it was optically equal to any of them, it would provide superior prints because of the 3-1/4 negative length. Make sure all conditions are identical so that the camera is the only variable. The only way you can find out how a thing works is to work it. Looking at it is not the answer.

Last week a salesman came in to our office with a new tripod. I wasn't there but he spoke to Lil and asked her to have me "look at it." She told him that I wouldn't be interested in just looking at it. Before offering it for sale I would insist on using it for a few months; throwing in into the car several hundred times, setting it up regularly in a foot of snow or salt water, freezing it overnight in the car -- using it. He left with it. Didn't want it ruined. If using it ruins it, I wouldn't sell it.

In the last Newsletter, I said I would describe

a method for getting infinitely variable contrast grades from graded papers. The spread is great between paper grades and I often find I need a contrast grade between, for example, #2 and #3.

If you have that problem too, buy some Kodak "Selectol Soft" (S.S.) print developer and put it in the first tray. Put Dektol in the second tray. If you make an enlargement on #3 and develop in S.S. only, the #3 will show about the same contrast as a #2. But if you develop the #3 paper for about 1-1/2 minutes in S.S., then drain the print (don't rinse) for 3 to 4 seconds, then continue development for another 1-1/2 minutes in the Dektol, you'll get a print about midway between a #3 and a #2. If that is too soft, try another time combination like 30 seconds in S.S. and 2-1/2 minutes in Dektol. By adjusting the time in the S.S., you can get infinite degrees of contrast between #3 and #2 using #3 paper. (Using #2, you can get all grades between 1 and 2, etc.)

It is important to use the paper that is too contrasty because you soften it with more or less time in the S.S. Always go into the S.S. tray first, then the Dektol, and keep the total time to 3 minutes no matter how you apportion it. Don't mix these developers together.

That's the easy part of contrast control. The hard part is determining the contrast grade that is expressively correct for a certain negative. Perhaps it would be helpful if I ran through my printing routine: First, I look at the proper proof to choose a negative (if you short cut making a proper proof, you know almost nothing about the negative -- it might be unprintable, etc.); if it looks good on the proof (don't bother with it if it doesn't) make a series of test exposures like 3,6,9,12 seconds across a sheet of #2 paper. Use a full sheet, make the strips about 1" wide so you can really see something. (See ZONE VI WORKSHOP for developing, fixing, etc.) Never use the two tray development for a pilot print. Just use Dektol. Now turn on

the light and carefully examine the high values only. The near whites -- a white shirt, white painted areas of a building, snow. These are high values (not highlights; highlights are specular reflections -- ignore them as they should print pure white anyway.)

Choose that strip showing the high value that looks like.....life! If 15 seconds looks weak and 18 seconds looks strong, you must make a new strip of 15, 16, 17, 18 seconds only. The rule is; do whatever is necessary to find out exactly what you have to know. Don't guess that 16 or 17 is correct; print 16 and 17 and then you'll know. Save the test strip -- it is important for later use.

The "Portrait" print I make for ZONE VI is of a man wearing a white shirt so I'll refer to that for those of you who own it. Let's assume that 16 seconds looks OK for the high value which in this print is the white shirt. I now make a pilot print exposed for 16 seconds on #2. The high value (white shirt) looks fine and all I have to do now is check the low values.

If areas of low value such as the dark pants are "dumped" into solid black and there is an overall feeling of "moonlite" harshness, the paper is too contrasty. (Naturally, if the negative has no useable density in the low values, you can't get anything in the print. The negative is at fault -- underexposed in this case -- but if you made a proper proof, you would know that in advance...and not print it!)

If, on the other hand, the low values are a mushy gray and the print lacks vibrancy, the paper contrast grade is too low. In either case, make a new test strip on the adjacent grade of paper and again look at the high value. Pick the exposure of the #1 or #3 paper that matches the high value of the original pilot print. That's the secret. Ignore everything else. The white shirt looks right in the pilot print so match it exactly. The repet-

itions and underlines are intentional -- match the high value.

Now make a new pilot print on the new paper at the new exposure time...let's assume 21 seconds on #3. Now we take another look at the low values. If they are now too black, you need a grade between -- the two tray development will zero you in.

If you went from the #2 to #1 paper and the print is now too soft, use the #2 paper with the two tray development.

To sum up. If you match the high values so that they look identical on, for example, grades 1 through 4 (it can easily be done) it is simple to choose the print with the proper low values. Where people get mixed up in choosing the correct paper grades is in trying to solve the high and low values at the same time. Two variables make it difficult. My rule is finalize the high value first. That eliminates one variable. Then change paper grades (or two tray development as discussed) to zero in the low values. Try it -- it works.

More and more, the problem is finding something to print on. Good printers are now frantic. A phone call from Caponigro. He searched all over and finally found a few boxes of outdated Varilour in San Francisco. He still has just a little bit of single weight Cykora left. A letter from Ansel: "We must be sure to press all manufacturers to continue the paper-base papers. A top photo-industrialist (I cannot divulge his name but it isn't Land) expressed deep concern about the RC papers. He fears that the base will deteriorate in a relatively short time."

A letter is in my file from J. E. Preston, District Manager of Dupont photo products, dated April 8, 1975: "At this time there is no intention of discontinuing Varilour paper...Velour Black graded paper is still available, and there are no plans to discontinue it at this time." Both were

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off the market within 90 days. So was Varigam.

For about a year now, I have been importing a beautiful silver-rich paper from Canada called Ilfomar. It was hard to get any quantity, grade selection, etc., and the price was shattering so I had not mentioned it. I want to tell you now that it too is being discontinued and we just ordered all the remaining Ilfomar. Can Ilfobrom be far behind? The man says, "Don't worry," but that's what the Dupont man said. I worry.

ZONE VI is an Ilford dealer as of now. We are buying freezers and loading them up with Ilfobrom. We will have all sizes in double-weight on hand. The other surfaces have not been good of late -- blotchy, etc. You can order directly from us. I'm glad that I had the foresight to buy up all the Varigam I could find. I don't intend to get caught on Ilfobrom either.

My advice? Buy as much as you possibly can. \$500 - \$1000 worth of whatever you think you'll need for a lifetime supply. Put it in a frozen food locker or buy a used chest type freezer. The paper will last indefinitely if it is stored that way. Write or call Bern at 802/365-4200 for big discounts on large quantities. You can't make a mistake -- even if they don't discontinue it. Can you imagine the price in five years if it's still around? Double...triple? It's academic. Ilfobrom is the last quality paper. It won't be around for long. There are two mistakes you can make; not buying enough, not buying now.

One company that really cares and has constantly improved its products is Polaroid. I feel honored that Polaroid has recently employed me to serve as field advisor to the company. In that capacity, I will be involved with the testing and evaluating of new materials from a photographer's point of view. How extraordinary in these times that a big company exists where the boss, Dr. Land, spends most of his time in the lab and where 100 sensitometrists, all

of whom are Doctors of something will listen to a guy who never quite made it through ag school.

Now, if I could talk them into making paper...

Perserverance...I just received another camera today. It is a folding lightweight 4 x 5 like the Nakaoga but it appears to be much more carefully built, made of better wood and has all the necessary controls, whereas the Nakaoga has no swing movements. It seems to weight about the same as my 9 $\frac{1}{2}$ " Symmar lens. It measures only about 6 $\frac{1}{2}$ x 8 x 3 inches folded and looks a lot like a Deardorff. This one costs about \$325.00 which is less than half the Deardorff price. I think it should be nice with a roll film back and my lenses for a lightweight outfit. I am going to try it with the Husky tripod and will let you know more about it in the next Newsletter.

I'll also go into a method for exposing prints that I have been using lately. I think it guarantees the most precise control possible.

I've been suffering the recurrence of an old back injury that has made two cancellations of the Mexican trip necessary. It is so much better now that I hope to be able to go in early March.

To you who have already applied for a workshop...welcome. If you are thinking of coming but haven't applied, you should do so fairly soon as we are already about half full.

*With Best Wishes
Fred Fisher*

ZONE VI Newsletter

NEWSLETTER #14
May 1977

"If one does not love photographs,
it is unnecessary to proceed further."
John Szarkowski

In the last newsletter the test results of the Horseman camera were described. The camera had some mechanical faults that might have been corrected, but two different low resolution lenses forced a change of Horse(man) -- sorry, I'm addicted -- in midstream.

I was still searching for a light traveling camera that would make a good-sized negative and looked at a few like the 4x5 Nakaoga, but it had no swing movements and I got it on good authority that the wood split on many of them. It looked like it might and my feeling was that the manufacturer weakened the camera too much to save a few ounces. The fittings are tinker toy and surely nothing you would want to be caught with in a primitive place.

I finally found a light field camera seemingly made to order. It's called a Field 45 and it is a close copy of a Deardorff but has several advantages: Deardorff 4x5's are really 5x7 cameras with reducing backs; they are quite large and heavy and if I were going to pay the price and lug the weight I'd get a Sinar or Cambo, etc., with bag bellows capability and more movements. In other words, I think the Deardorff is neither a light handy field camera nor a sophisticated technical camera. It's a little of each. And it costs over \$700.00.

Putney, Vt. 05346

The Field 45 is a beautifully made lightweight wooden camera from Japan. The fittings are very strong, the construction is heavier (about $\frac{1}{2}$ lb) than the Nakaoga, it has both swings and tilts and folds into itself making a self-protective package that weighs in at about three pounds and measures only $6\frac{1}{2}$ "x8"x3" folded. Deardorffs weigh twice as much and are much larger. Did you know that the new 35mm reflexes weigh over three pounds?

I don't object to camera size and weight when I'm home. I use an 8x10 Sinar almost exclusively and it, with lens, weighs 20 pounds -- without tripod. An 8x10 has a groundglass like a T.V. screen, makes negatives good enough to eat, and I'd like to use it all the time. But for traveling it is just too tough to handle. The greatest problem while traveling with it is the difficulty in carrying and loading the big holders.

Zone VI is selling the Field 45 and if you want a beautiful lightweight camera for back-packing or travel or anything, it only costs \$325.00 and you will find it a joy to use.

I kept hoping that my back problem would clear up in time for me to take my trip. It didn't. I'm not too disappointed. This is one of the loveliest seasons. If I had gone I would have taken the Field 45, two Calumet Roll film backs and just two lenses; a 121mm Super Angulon and a 210mm Symmar S. The Calumet back gives me a negative on 120 roll film measuring $2\text{-}1\frac{1}{4}$ x $2\text{-}3\frac{3}{4}$.

The camera will take regular 4x5 holders as well as a 4x5 Polaroid back, but I wanted to travel really light this trip and avoid carrying holders and loading film. I can get fine quality in a 5x7 print from a $2\text{-}3\frac{3}{4}$ negative. (That is equivalent to a 4x5 negative making an 8x10 print, which it can do very well.)

This is the third year of Newsletters and I've never really written about view cameras. There is

a lot of interest and many letters arrive asking about them. Even if you use only small format at present, you too may have some interest now or in the future in a larger format.

I think the reason so many people are confused about view cameras is that some tech writers don't know much about them and give out a lot of erroneous information. One of the magazines recently ran an article called "View Camera Short Course - Swings and Tilts" where the writer didn't know which was which and got them reversed. So you won't forget: Swings are about the vertical axis, like a door swings; Tilts are about the horizontal axis, like a table tilts.

A view camera is simple. It consists of a front standard that holds the lens board. (Each lens is mounted on its own board.) The front can be centered on axis so that the middle of the lens is in line with the middle of the negative. It can also be raised, lowered, slid to either side, tilted forward, and swung to either right or left. It can also tilt back, but I can't imagine a use for this movement. Yes I can; I used it just once in a cave in Easter Island when photographing the confluence of the wall and ceiling. (The exposure was the length of time it takes to have a swim. Picture came out fine and appears in "Rapa Nui")

The front holding the lens is attached to the back which holds the film by a light-tight bellows. The length of the bellows draw determines the maximum length of the lenses that can be used. For example, a 12" bellows can focus up to a 12" lens, but only at infinity. To focus a 12" lens closer requires more than 12" of bellows draw. The Field 45 has 12" of bellows. With the 210 Symmar (8") and the bellows racked right out you can get a 1-2 image ratio. In other words, a photograph of a postage stamp made with an 8" lens racked to 12" would give you an image on the negative $\frac{1}{2}$ the size of the postage stamp. Therefore, 12" is plenty of draw for an 8" lens for most purposes. To get 1-1 you

would need a bellows twice the focal length of the lens.

The front and back are held in alignment by means of a rail or on a flat bed. The flat bed cameras fold up nicely; the rail cameras are more cumbersome but somewhat more rugged in the larger sizes. An 8x10 wooden flat bed is as shaky as a maple leaf if there is wind but a metal flat bed like the Calumet is fine. In small cameras, either is OK. The Monorail cameras have more flexibility by extending the rail, adding more bellows and changing to bag bellows for more freedom to swing and tilt short lenses. They are clumsy to transport however and you need a case as long as the rail.

View camera backs can tilt and swing and sometimes slide left to right. The back slide is a seldom used movement, but the Field 45 has it. The back holds a ground glass on which you compose and focus. When workshoppers who have never looked at an image on the ground glass of a large format camera see one for the first time, strange things usually happen. The mildest reaction seems to be @#\$\$%&* I CAN SEE! And you really can. You are not squinting through a keyhole, you are looking at a picture-sized picture projected on to the ground glass as clear as a transparency.

I use magnifying glasses of about twice the strength of my reading glasses to compose and focus the image on the ground glass. If it is in focus on the ground glass it will be in focus on the film. There is no way it can get out of whack. When the film holder is inserted, the film occupies the same plane as the ground glass did. (The ground glass back springs backward to allow the holder to occupy its place.)

In the mechanical focusing systems of reflex cameras, the image may be in focus in the finder but out of focus on the film. This is not at all uncommon and if you are wondering why something you didn't focus on is often sharper than what you focused on,

or if nothing is really sharp (that could be a back focus problem) try this: Position the camera on a tripod at an acute angle to a picket fence. Hang a rag or a can on a picket about ten feet away. Focus a standard or longer lens carefully on that picket and expose with the lens wide open. Make a big enlargement of the section of the picture containing the focused picket and if the picket in front or in back is sharper, or if none of them is especially sharp, send it to the repairman. Include the picture.

All the mechanics in a view camera are in the lens. The aperture and the shutter are all there is. View camera lenses don't have to be stylish, don't have to be automatic, don't have to be fast, or light, or couple to a meter or project on a mirror, etc. They only have to be sharp. All the money goes into the glass. They are sharp at the image edges because, in a way, there are no edges. For example, a 210mm Symmar can cover an 8x10 negative with all controls at neutral. The coverage of a 4x5 negative with that lens is, therefore, exceptional to the corners because you are using only the sharp center of the projected image. Covering power costs money so hand camera lenses have no excess of negative coverage. That is why the corners of hand camera pictures don't have quality equal to the centers. When you make a picture with a hand camera and then print it with a too short enlarging lens which also doesn't cover too well, the problem is compounded.

Testing out a view camera is simple. It's nothing but a light-tight box. To find out if it's light-tight under all conditions, put in a loaded holder, pull the slide, and rack out the bellows all the way. Sometimes a bellows will be light-tight extended to four inches but leak like a sieve when it's stretched out. Now take the camera into bright sun and turn it over on its back, aim it up, down and every way so the sun can strike it from every angle. Develop the film and if it isn't as clear as scotch tape, there is a leak.

If there is, take the camera into the darkroom, extend the bellows, stick a flashlight into it and look for the stars. Black tape over the holes inside and out will fix it. This only applies to ancient bellows; new ones are light-tight.

Other than testing for light leaks, there's nothing left to do but use it a lot without babying it, and if it doesn't annoy you with little plastic knobs in the wrong places, if it has sufficient movements and fittings that don't break, it's good. The photographic quality you get from any view camera depends entirely on the quality of the lens. A \$2,000.00 Sinar with automatic gear shifting won't give you better image quality than a \$200.00 Calumet if you use the same lens with both.

I was going to go into the movements and what they are used for, but that's enough camera stuff for now. I'll pick up the movements in the next Newsletter.

Some quick announcements; then on to the printing begun in the last Newsletter. (1) The 1977 workshops are all fully subscribed. (2) I will be having a show, a 70-80 print exhibit, at Helios Gallery, on 67th Street between Fifth and Madison, in NYC in September. If you would like an invitation, just drop me a note. I have had few shows because I don't like many galleries, but Helios is exceptional. It is physically outstanding, the most beautiful photo gallery I have seen. The Director, Scott Elliott, knows and cares about photographs. He does not speak with fork-ed tongue and so far has not said "oeuvre" or "genre" in my presence. Both Lil and I were so impressed with both the gallery and Scott that we each lent him a Paul Strand print for a recent Strand show. I've never done that before!

Let's print. Last Newsletter discussed the reasons for and the methods of printing for the high values. The stripes on the test strip where the high values look right is used as the exposure for the pilot print. If the low values in the pilot print

are then too low (areas of dark detail are "dumped" into black), a softer paper is then used and you start over and make a new test for the exposure that will give you the same good high values. (Ilford says all grades are the same speed. They are not; make a new test strip.) The softer paper will render the dark grays with detail if the negative has sufficient low value density. If it doesn't have, you can't print it. How can you tell? The proper proof. Bad negatives make bad prints. Don't waste time and paper on a turkey. And don't try to print on Koda-no-black or Polycontrastless or Grayvira.

Don't handicap yourself. The best there is is what you need and the amazing part is that less accomplished photographers who need all the help they can get work with junk that wouldn't get house room with Ansel or Brett Weston. These two, and Oliver Gagliani, are, in my opinion, among the best printers in the world. Beseler 4x5 enlargers, cold light heads, long Componon lenses, Dektol (Amidol for Brett) and Ilfobrom paper. That's what they use. They KNOW they can't make a good print from a Microdol negative. They know that they can't make a good print with a condenser head, that LPD is a gutless print grayer, that Kodak papers have no black in them. Don't make it hard (impossible) for yourself.

The right negative, enlarger, paper and developer will give you a proper start. If you don't have them, get them. I got a letter from a fellow in Indianapolis last week. He said, "Got the cold light head last week and I could weep. I have been photographing for over 20 years and a half hour after I received the head I made the best print of my life. Why didn't somebody tell me?"

If in twenty years he hasn't made a good print, it must be because he makes the same mistakes over and over again. (There aren't enough different mistakes you can make that will spread over twenty years.) Having a condenser head is only one mis-

take. There are others, and the secret of becoming as good a photographer as you can rests in two other pieces of equipment; the pencil and the ashcan. How can you avoid making the same mistake again unless you know what you did the first time? WRITE IT DOWN Assume you make an axis light picture of a building and the sky is too dark. Was it a "G" filter or a #12 or no filter at all? If you wrote it down when you made the exposure, you would know. Repeating the same errors is inexcusable. The ashcan works like this: If it isn't the very best you can do, it comes out of the darkroom in the ashcan. No exceptions, no "work prints," no excuses. My rule: "If I don't like it, it's no good."

I get upset when a student shows me a print and explains, "This would look better on #3 paper with this corner burned down more." If he doesn't care enough about the picture to make the best print he can, then he never should have printed it at all. Or is it that he is afraid to commit, to say this is me, it is the very best I can do? I don't know, but I do know that artists have to speak out loud and clear if they want to communicate.

With a good negative in the enlarger, make a test strip. Try to get the right strip near the middle of the paper. Before you make the exposure, write lightly on the back of the paper with pencil, "Ilfobrom 2, four sec, f/11, 2 min, Dektol." I write on the back of every single print I ever make. So did Paul Strand. Join the club. I know that an 8x10 print from a 4x5 negative should take about 20 second on Ilfobrom #2 at f/11. (I know because it is written down). So if I am going to make a test strip with ten one inch stripes, I set four seconds on the timer. The fifth stripe or thereabouts should be correct.

There are several reasons why this is a good way to do it. By the fifth stripe you are down to 20% increments so the difference is much more refined than between the first and second. The first and second are 4 and 8 seconds which is a 100% increment. Twenty percent more or less exposure is "seeable but

discreet." Assume 20 seconds looks good. Ninety-nine out of 100 photographers would reset the timer to 20 seconds, but there is a better way.

To make the pilot and final prints, do not change the timer setting from 4 seconds to 20 seconds. Leave it at 4 seconds. Twenty seconds continuous exposure will give you a very different result from five 4-second exposures, for reasons too numerous to waste space on. Try it. Don't change anything else either. If you think that 20 seconds at f/11 is actually equivalent to 10 seconds at f/16, try it. You'll find it is theoretically equivalent. (Different is not the same.)

Ideally, you might try to achieve printing times between 20 and 30 seconds. The object is to get five or more "bursts" of exposure to make the print. If the test strip looked like the right exposure was the second, third or fourth stripe, throw it out, close down a stop, and start over. Do not proceed to the pilot print until you have a neat, informative test strip of one inch stripes across a full sheet of paper. You must master this negative; never lose control of it, never let it gain the upper hand.

Now, make the pilot print to precisely match the test strip by giving the same number of "bursts" as looked good for the test strip.

Develop the pilot print and fix it for at least 30 seconds. Prints take at least that long to clear so that you can get usable information.

The full pilot print is a different experience from the test strip. When you first see the whole picture, the impression may be that it is too dark or light, dull or contrasty. Keep it simple at this point; don't even think about refinements. What you are looking for at first is only the formula -- the right contrast and depth of tone. That means the right paper, exposure and development time for that negative. Get those nailed down -- contrast and

tone -- and the rest is easy. Go slowly. Step by step. Gather the information you need. Write on the back of every print.

If the pilot print is too light or too dark, check your test strip again and pick another exposure. If the pilot print had the wrong contrast, make a new test strip and a new pilot as above on the other paper. Throw the first pilot away now. It will only clutter up the sink and your mind.

Assume the 20 seconds (five 4-second exposures) looks fine for most of this print but the sky is falling off weakly at the top and the shadows across the foreground are too deep. Look at the test strip again. You can see that the sky at the top in, perhaps, the 28 second exposure should look about right and the foreground at 16 seconds should be fine. These are always educated guesses at best. You have to see the whole print made that way and adjust, and adjust again until it's right. So, for the next print, write on the back, "Ilf. 2, 20 sec, f/11, minus 4 foreground, plus 8 sky." Dodge the foreground with a card during one of the 4 second exposures. Add a sixth and seventh 4 second exposure to the sky.

Everything affects everything else. The sky, though printed identically, will look different in a print where the foreground is not dodged from a print where the foreground is dodged. But this first manipulated print will indicate the direction to follow. It will show you plenty if you really study it. Take time. First, how is it overall for the simple things; contrast and exposure? I know you checked that before. Check it again. Be as completely objective as you can. Do you like the direction it's going? Are the burning and dodging too much or not enough? Are you sure you like the picture at all? Please don't laugh until you think of all the negatives on which you -- and I, and everyone -- have wasted time and effort. It's your darkroom and no one can see what's going on in there. You are allowed to ashcan everything at any point and no one will ever know. But let's imagine we like what is going on here.

Don't settle for what you have. Carry the burning and dodging a big step further if they have improved the print. Be absolutely sure you haven't stopped short of optimum. To do that you must go too far and then come back. Don't sneak up to it; surround it.

You have to learn what long development times can do. It's simple to make two new test strips and write on one, "3 min," write on the other, "4 min." Pull each from the developer when its time has come and compare the high values with the pilot print. Make 3 and 4 minute pilot prints at the exposures that will match them to the high values in the 2 minute pilot print. Line them up and look carefully at the differences. Don't look for the easy answers like "3 minutes is better." Sometimes it is, depending on a host of factors, sometimes it isn't. Just work with the materials. Write everything down so you know what you did, study the results. Get the feel for the materials, simplify.

People come into my darkroom and say, "This is going to be nice when you get it set up." It IS set up. It's practically empty, looks as bare as an operating room and is just about as clean and efficient. It contains the minimum of everything. It's not a lounge or a storage place for unused junk. It's a laboratory for developing film and making prints. Why is that so important? Couldn't you do just as well with more gadgetry and enlarging meters and densitometers to tell you what contrast the negative will "fit" on? No, and as a matter of fact, people with that gadget attitude are so far off the track that they invariably destroy any hint of personal richness that they may have gotten into the negative.

If you really want to do it, start out and do it. Start with one negative. Follow the last Newsletter and this one meticulously. Don't interpret, don't invent, don't improve on anything. Half the people who read about the work of someone who gets better results than they do are inventing "improve-

ments" on his methods before they even finish reading. That's absurd. If I heard that Ansel printed in a Bikini and trout boots, I'd try it. Make one really expressive print whether it takes two hours (that's minimum) or a week, five sheets of paper or a box, but print it so that you can truly say, "That's me, it's what I am and it's the very best I can do."

Scary? Oh yes, but artists are artists because they commit themselves. It's up to you. Lil is an ex-educator, a Dean at Sarah Lawrence College. She tells me not to get discouraged with teaching; that 98% of the people won't put out what is needed for real accomplishment. They won't stretch themselves or work. She says all teachers know that, but what keeps them going is the thought that maybe one or two will be affected and that makes it all worth while. She's right, as usual. I hope the one she is talking about is you.

Sincerely,
Fred Pickers

ZONE VI Newsletter

NEWSLETTER #15
September 1977

"Photography, if practiced with high seriousness, is a contest between a photographer and the presumptions of approximate and habitual seeing."

Looking at Photographs, John Szarkowski

Since the last Newsletter, in which I wrote that I would discuss view camera controls, so many letters have arrived asking for specifics on view camera handling in general and the use of our camera in particular, that answering them would have filled an entire Newsletter. Therefore, I decided to incorporate the information in a separate folder, a copy of which is enclosed.

Three workshops, a week spent judging the grant applications for the Vermont Council on the Arts, research work for Polaroid, filling print orders, personal photography, working out new products, helping Bern with the new (first real) Zone VI Catalog, and assembling work for my up-coming show in New York have eaten up the summer. The time pressure on both the gallery and me have been great and by mutual agreement my show has been re-scheduled for Feb. 14 to Mar. 11, 1978. The address is Helios Gallery, 18 East 67 Street, New York City, and there will be a reception from 6:00 to 8:00 p.m. on February 14th. Please consider this your invitation; I hope to see you there.

The three workshops were most rewarding. All were filled to the brim and to those sixty or so who were too late in applying...Be earlier next year! Announcements will be sent in January. The Alumni workshop was very exciting. The strides made by the participants in their seeing and execution were dram-

atic. They hung a show that would be a credit to many a big city gallery. They have learned what we know to be the truth; that what most photographers think the problem is ("I just want to brush up on my technique.") is not the problem at all. Most people's technique is superior to their visual ability to exploit it.

The real problem is so knotty that it is virtually ignored. It is the improvement of visual technique and, even more difficult, the bridging of that elusive gap between the admirable and the wonderful. Neither of these techniques have anything to do with how you shake the film can; they have everything to do with how you feel about and view the world, what music you hear, what drummer you march to. I got a letter last month from a fellow cancelling his Newsletter subscription because there was "too much philosophy, not enough nuts and bolts." Ansel, in the introduction to Camera and Lens... "There are thousands of photographers who happily claim to be 'nuts and bolts' practitioners and revel in their opacity." Nice phrase. My nightmare: Sixty opaque revelers will arrive together for a single workshop! But it won't happen really; the law of averages and the phrase "equipment buffs should not apply" in the workshop announcement seem to keep the number down to a manageable minimum. We always get a fine and serious group.

I'm not much of a joiner, clubman, etc., so was somewhat surprised to find myself on the Boards of both the Vermont Council on the Arts and the Friends of Photography in Carmel during this past year. The Vermont Council experience was marvelous. Our small panel of photographers (that's rare in this sort of thing) insisted on not seeing the silly words they make photographers write when applying for grants. We looked at photographs and gave the money to those who could hang 'em on the wall. We never found out or cared whether they could talk about it.

Don't think that's not rare. I just saw an application for a prestigious grant. Three separate supplementary statements are required. You start off

with yards of verbiage about your past accomplishments, other grants, etc. On the next statement you list shows, prizes won, publications, teaching, etc. and, for the grand finale, your dreams of future accomplishments. That's only step one. If they like the smell of that baloney, you are allowed to have three big names recommend you as a staunch personality and sterling worker of finest character. If your recommenders are impressive enough, THEN you are asked to send photographs! Incredible...may the best talker win the photo prize. Oh yes; everything must be typed on 8½x11" paper, one side only with ½" margins left and right, one inch at the top. All three statements are to be in triplicate except that you need four extra sets of "plans."

Edward Weston won the first Guggenheim in photography. His 'history' he wrote up as "self taught;" his 'plans' he described as "continuing my work." He wouldn't have had a chance for most grants in 1977.

Anyway...my experience with "The Friends" was not as rewarding. After "serving" on the Board for a year, I received a form letter thanking me for my contribution and advice and notifying me that my services were no longer required. At no time during that year had they ever asked my advice, so I got a bit hot and wrote a zippy note. I can't remember it all but I remember saying that if they had asked my advice, I would surely have opposed their celebration of the public area and the abuse of the camera they seemed to encourage by filling "Untitled," their house organ, with mediocre snapshots. I finished up with "Garbage does not improve with age." After writing it, I decided I was out of order but I wanted my friend Ansel to know how I felt about the way things were going out Carmel way, so I sent it to him. His reply was so beautifully stated that I asked him if I could use it in this Newsletter and he graciously agreed:

Dear Fred,

Cheer up! I think you are doing a great job.

We reduced the Advisory Trustees to ten; it was impossible to effectively manage more and the new director, Jim Enyeart, is doing a very fine

and intense job. A lot of people went off the Ad. Tr. list. The Friends has taken a new tack, has become national in character. Your help to the Friends is really and truly appreciated. I will go off the Board in a year or so (really hung on to help hold things together while a new Executive Director was being sought). I have no feeling about "position"; I think I can do as much, or more, for the F.O.P. off it than on it! I think you will be pleased at the development in the F.O.P. even if you do not like all the photography of our time.

Look - I work in my own way, following my basic concepts of photography. Bach made his music and Mozart made his. Both are very different. And Stravinsky and Bartok are very different from both of them. But it is all great music - in one way or another. It would be foolish and immoral for me to jump on the bandwagon and make pictures like Gene Smith or Heinecken. It is just not my style. But that does not prevent me from appreciating them for what they are - explorers and creative artists of our time.

I agree there is some "abuse" of the camera. However, you can't hurt the camera; you can only hurt yourself and, perhaps, a few other people. You can't hurt photography, because - as any art - it will always find its own level in time.

Agreed: I want to share experiences which I think are important and which I think beautiful. You hit the nail on the head when you related work of my type to "great music of another time." I am interested in "another time" which includes the future time (and certainly the present). But as I am 75 years old, I cannot put myself in a youth's shoes and climb high mountains and new concepts! They will accomplish their life's work in their own way just as I accomplished mine in my way. People are trying to express themselves through photography - not imitate what has been done. When students try to imitate Weston

and Adams, et al, they are just wasting time. It has always been the NEW thing that counted in the creative fields, not imitation!

Do not confuse music with its performance. An inclusive musician enjoys the chromatic Fantasy and Fugue by Bach along with a piano sonata by Bartok and may very well respond to complex experimental electronic music.

Performing the music of Bach is re-creation. To write Bach in these days would be imitative - not creative. Creativity is universal, but has always been thrusting ahead into new domains. I think there are too many photographers working today in an euphoria of imitation (or self-imitation), and not climbing new mountains. I have not made pictures for quite a time; I have been involved in printing what I have done (I had a distressing sense of in-completeness, and whenever I tried to photograph I was just pot-boiling). I have an exception in a few images I secured in England and Scotland last summer - when I am free of the pressures of printing longstanding orders I want to go back there and - who knows? - I might have a whole new creative stage. But I am not going to force myself into a new approach just because its new!

You are right - much art, including photography, of our time seems designed to shock, to evade and sensationalize. Some of it does (and with sad ulterior motives) but much of it seems that way because it is new and unfamiliar. In order to live, the artist must "exploit" his work in one way or another. The history of art clearly shows that the great artists were not necessarily great people! Some of the great artists I know are utterly selfish and self-centered, immoral, and unethical. Some are great people in all directions (not many!!). Anyone who consciously degrades his medium is simply no artist; but sometimes our work gets misused and misinterpreted.

I was just writing a little piece that might fit

into the introduction for a new edition of Book I. In it I mentioned that most spectators look at photographs in terms of the subject; your Iceberg or Easter Island image, my Winter Sunrise or Moonrise, Hernandez. They are not aware of the "other dimension" that we add to it by our "departures from reality". The concept of the "fine print" has no meaning for them. The "Academic" approach was to glorify the subject (refer to some French, English and earlier American painters). Around the turn of the century some artists expressed their resentment of the "Academy" and turned to "abstractions" as a way of expressing their personal concepts. "Dada" was a movement of ridicule which - to the surprise of the artists - people took seriously!! There sometimes seems to be a power of decision that is beyond the individual. We live in a continuing Renaissance. The worst thing that could happen to the world at this time would be to have its ideas and arts become sterile. (The rest of the letter is personal.)

As ever,
Ansel

I agree with Ansel of course; all voices need to be heard and all work done with seriousness of purpose deserves an airing. But I continually wrestle with questions that seem to me to be key but that critics and gallery owners seem to ignore in judging new work: Does it move or intrigue me? Do I respond affirmatively? Does anyone?

I am so sick of the Magritty themes, so bored with the grinding negativism so rampant in all of the arts. Where are the photographers to make the music heard in Ansel's Aspen Trees, Strand's Horses on the Beach, Lange's Migrant Mother, Weston's shells and nudes? Where are the painters to delight the heart as Cezanne and Renoir did? I read somewhere that since the Second World War much art has been produced that is interesting but very little that is beautiful, moving, or profound.

What is your response to the above? How about a letter in agreement or rebuttal for the next issue?

Larry Siegel wrote an editorial in "Photography" called "The Last Scrap of Paper." I think it is so important to all of us that I will reprint it here:

How do you write an epitaph for one of the most important and expressive aspects of our medium? Though not announced officially, reliable sources indicate that Agfa will soon stop production of their conventional fiber-based black-and-white paper. That's right--no more Brovira and Portriga! They will be replaced by RC versions on one or both papers. A Kodak rep said that they too will convert to RC. Ilford, which produces a fiber-based paper, Ilfobrom, is apparently standing pat for the moment.

I take this alarmist line because part of my artistic life is on the line. And I remember, too, my past apathy when other papers disappeared. Brovira and Portriga, like the other papers removed from the market, have not and cannot be replaced. How long can we keep adapting? And to what?

All photographers committed to the fine print must realize that the print as we know it faces extinction. The fine print is an endangered species. What can we do? Must we have silver under plastic?

While on the subject of paper, there are a few things you may not be aware of: Not all Ilfobrom is good; some is awful. We receive irate calls from folks who have bought it locally and have gotten poor quality. The reason is that Ilfobrom is made in more plants than one but only one plant produces fine quality. We know which is which.

One of the best silver papers ever made was Ilfo-mar. Most of the 500 prints in the Strand retrospective show were printed on it. It was discontinued last year and as far as we know Zone VI has the only quantity still available. We have it in 8x10 double weight only, glossy finish only, and grades 2 and 3 only. The price is \$85.00 a box of 100 sheets or \$24.00 for 25 sheets. We keep it refrigerated and if you keep it

that way, it will last a minimum of 20 years. (Freezing is not necessary; anything under forty degrees is fine.) At room temperature it will last in top condition about four years.

Because this is truly the last of the great paper. I make sure I get a finished print on every single sheet of Ilfomar -- 100 fine prints out of each box -- and you can too:

Set up the enlarger for about an 8x10 print, stop the lens way down to f/16 or f/22, no negative, set the timer for one second and give a whole sheet of IlfoBROM #2 a one second exposure. Cover a one inch strip at the right margin with a card and expose again for one second. Move the card another inch to the left and repeat, etc. Now take a sheet of IlfoMAR #2 and do the same thing. Develop them together for two minutes, stop and fix for a minute and then compare. Find the lightest tone you can on the IlfoBROM and match it to the same tone on the IlfoMAR. Do the same with IlfoBROM #3 and IlfoMAR #3. You will find that the BROM is about twice as fast as the MAR; the BROM at four seconds might match the MAR at eight seconds, for example. All you have to do now is print a negative to your satisfaction on IlfoBROM. When you have the print exposure worked out on IlfoBROM, simply multiply your exposure time (including all burning and dodging) by your factor. Mine is 2.0 but you should work out your own because of a dozen possible variables.

Then make the finished print on IlfoMAR. It will work beautifully every time and you won't waste a sheet after the first test. There will never be another paper like it. It is exquisite. Use it well.

With best wishes,

A handwritten signature in dark ink, appearing to read "Fred Picker", written in a cursive style.

ZONE VI Newsletter

NEWSLETTER #16
December 1977

"For photographers who are not confined to projecting their own obsessions, there are arresting moments, beautiful subjects everywhere."

Susan Sontag, On Photography

The last Newsletter contained a fine letter from Ansel Adams and some comment from me concerning the new semi-porn snapshot type "conceptual" photography that is filling the pages of the more serious publications and larding the walls of galleries and museums. Readers' comments were invited but I never expected the deluge of mail that arrived. There were more than a hundred letters which makes inclusion of any of them difficult and arbitrary.

To sum up, without exception the writers were annoyed, bored, or disgusted with the photography in current vogue. The following description of that kind of work and the position of a leader of today's photographic bureaucracy is found in "On Photography" by Susan Sontag:

When Irving Penn, known for his handsome photographs of celebrities and food for fashion magazines and ad agencies, was given a show at the Museum of Modern Art in 1975, it was for a series of cigarette butts. "One might guess," commented the director of the museum's Department of Photography, John Szarkowski, "that (Penn) has only rarely enjoyed more than a cursory interest in the nominal subjects of his pictures." Writing about another photographer, Szarkowski commends what can "be coaxed from subject matter" that is "profoundly banal." Photography's

adoption by the museum is now firmly associated with those important modernist conceits: the "nominal subject" and the "profoundly banal."

Suddenly I'm tired of the whole thing and reminded of a story about either Thurber or Benchley. Whichever it was would go to The New Yorker office in the morning and type the word "The." He would stare at it for half the morning and then head out for a neighborhood bar where he would spend the next six hours. On his return he would add to that lonely word, "hell with it."

Lots of questions about a few things concerning view cameras, tripods, meters, etc:

Spike feet are standard on all professional tripods because the rubber buttons are bouncy and unsteady. To protect fine floors, pros use a 'spider for indoor use. It's a three-armed hinged aluminum thing with holes for the spikes drilled half through near the end of each arm. You can make one from 1x2 pine or you can, like me, use three 8" squares of plywood with a hole in the middle of each. Staple a piece of inner tube to the bottoms to prevent sliding on waxed floors.

Lens hoods for view cameras. The best one shades the lens perfectly without vignetting (as any fixed lenshood will do if you swing, tilt, raise or lower the lens off axis). It's light, it's always convenient to hand, and it's free. It's the slide you pull out of the film holder before exposing -- just cast a shadow on the lens with it.

Filters for view cameras. Don't buy the round glass ones like those used on hand cameras. They are real image degraders and those who keep a skylight filter on their lens to protect it would be just as well off, as far as image quality is concerned, with a \$25 lens and not worry about protecting it. I know, the man in the camera store (who sold it to you) says I'm wrong. Try it: Tripod the camera, photo-

graph tree branches against the sky at infinity with and without the filter, make prints, show them to the man in the camera store.

Filter gels are the answer. Buy 3" squares. I use a "K-1" (1/2 stop factor - light yellow), a "12" (1 stop - medium yellow), and a "G" (1-2/3 stop - orange). The gels are thin as cellophane, cost about \$4.00, and, for resolution, are far better than even the best plane parallel glass filters which cost about \$100.00.

Make a filter frame. Cut a 2-1/2" diameter hole in two 3" squares of a stiffish paper. A manila file pocket is fine. Sandwich the filter and staple around the edges. (Calumet makes such a thing for about \$1.00).

Make a filter holder. I invented this one and it fits my description of good gear; cheap, rugged, simple, and dependable. Get a 2" length of steel strapping tape from the town dump or any store or industrial plant. Bend it into a "Z." The distance between the foot of the Z and the top should be about 1/8" greater than the distance between the back of your lensboard and the rearmost projection of the lens. Epoxy the foot of the Z to the back of the lensboard 1/8" above the lens. (The foot of the Z is parallel to the top of the lensboard). Get a 1/4" x 3/4" Alnico magnet from a hardware store or buy a magnetic pot holder and cut out its magnet. Lay the filter over the back of the lens, lay the magnet on the foot of the Z and put the lens back in the camera. The filter is fastened at the top by the magnet and hangs behind the lens. The optical advantages, in addition to the practical ones, are: the filter won't pick up reflections, won't vibrate or blow off in a breeze, and it is in the best possible position optically -- same as when you lay a filter on the top (back of) the enlarging lens.

Many questions about metering through filters. Don't even consider it. Meter cells, especially

the cheap little meters they build into cameras, are often so eccentrically color sensitive that you can take two cameras, aim them at a blue wall, for example, and they will agree. Then aim them at a yellow wall and one needle will go up, the other down. Always meter without the filter.

The other big meter headache is non-linearity from bottom to top of the scale. Here's what happens: Two identical meters are aimed at a barn wall in shade. Both needles go to #10 (or give the same exposure information for Zone IV or V, etc.) Take them out in the sun, aim them at a white door and one reads 16, the other reads 18. One is wrong... but you need a photometer to tell which one it is. Many of the Weston Ranger 9's and the one degree Pentaxes are terrors in this respect. They over-read dim light (so you underexpose in a library) and underread bright light (so you overexpose a white building in sun).

To find out whether your meter is friend or foe, borrow a photometer (SEI) or check over your "proper proofs." If there is a pattern of under or over exposure in either high or low light levels, the cell is probably not linear (and it never will be). Manufacturers might try harder if the photo magazines wouldn't list just the size, weight, features, price, etc. of meters but would test them for linearity and color sensitivity. The meters Zone VI sells are panchromatic and linear too, and that's an unabashed commercial to which I feel entitled because it takes a lot of time and know-how and an excellent calibrated photometer to weed out the turkeys.

Luna Pro Conversion. The catalog failed to mention it but the conversion does permit use of the spot metering attachment. All you do is change the ASA setting when you add the 15 or $7\frac{1}{2}$ degree attachment. Simple instructions accompany your meter when it's returned to you.

The Luna Six can also be converted as the dial is basically the same.

No, the Zone VI Field Camera is neither a Nakagawa nor an Ikeda. It is better designed and constructed than either of them. The focus mechanism, for example, on our camera is silky while the movements of the others are rickety, etc. We've been using it steadily for a year and if we didn't think it was superior we wouldn't sell it.

Enlargement causes an enormous loss of image quality in terms of tonal progression and resolution. This can easily be seen if a 4x5 negative is contact printed and then printed by projection (in an enlarger) even if the "enlargement" is only to 4x5 size. Just putting an image through another lens, no matter how fine, obviously costs you something. If, during the enlarging exposure which usually lasts 25-40 seconds, there is the slightest movement of the enlarger or the paper, the result will be a degraded image.

Most enlargers are poorly designed and badly constructed. Mine is an Omega D-2V that was a gift and I can't imagine anything worse (before I modified it). What makes an inclined arm with a heavy weight at the top and no external braces or supports to keep it from waving around stay absolutely still? Nothing. I'd swap it fast for a 4x5 Beseler which is, I'm convinced, the only really solid enlarger design, but that would mean scrapping a \$1,000.00 Codelite head which only fits the Omega. So I had a machine shop build a massive angle iron which is bolted to a long 2x6 timber which is part of the wall. The enlarger baseboard was removed and the column was bolted to the angle iron. That held the bottom.

The top was attached to the wall behind it with a 12" turnbuckle and, in addition, two heavy wires with 6" turnbuckles extend forward at a 90 degree angle to each other and are fastened to eyebolts in the ceiling. That takes care of the top.

The base is a formica-topped cabinet that is very solid. Even so, I'm careful to stand quietly and keep my hands off the counter while enlarging.

The cabinet has some features that have worked well and these will be described in the next Newsletter.

Last call for paper. An article in December 1977 Pop Photography contains a letter from Ansel Adams: "...it is heartbreaking to feel that the manufacturers are cutting down the availability of papers and apparently leading toward ubiquitous plastic-coated sheets."

Paul Caponigro: "Each year more of our remaining papers lose in quality while others disappear. Today the situation is desperate. The replacements for the fine silver papers we have known are of course plastic-coated papers. Blech! I personally find them affronting; textureless, scaleless and lifeless. And I am told they will not even last."

Gene Smith: A telephone conversation Feb 7, 1977: "If they go to the plastic papers, I think I'll give up photography -- (long pause) -- or coat my own paper... About the RC paper: It turns my stomach, and you can quote me on that."

You can prepare to add Ilfomar to the lengthening list of extinct papers of quality. We have a few dozen 25 sheet packages left to sell and the rest we are keeping for our personal work. If you want some, you had better call: (802) 365-4200.

How long it will be before they stop making Ilfobrom? It depends who you talk to, but there is one thing sure; if you buy it now, you'll have it. If you don't, who knows?

The dates for next summer's workshops are June 18-28, July 16-23, and August 13-23. The July workshop will be for alumni only and running concurrently there will be a workshop under the direction of Lil Farber for women only. We will send you more detailed information in January.

"Woods make people love one another and kind and obliging and good natured."

The Reverend Nathan Perkins
Journey to Vermont, Spring 1789

The leaves and leaf peepers have been and gone, likewise the bear and deer hunters. Snow and the bodies of skiers now blanket the hills. Seasonal transitions in Vermont are abrupt and the characteristics of each are specific. The dramatic earth changes are always exciting and usually arrive just when you'd like them to, though April has been known to drag its heels.

I wonder if I can do something. I'll try.

My notebook is a "how to" book of the seasons. Last summer's notes read, "Rt. 12, abandoned farm 14 miles S. of Montpelier -- in snow." and "gravel rd. west out of Coventry -- the pastures of heaven -- should be like Sibelius in snow." (These notes are for myself, so if I get carried away there's no harm to it.) And "fantastic beaver pond -- wait for ice -- E. of Adamant 4 mi." and "Moss Glen Falls Rt. 100 south of Waitsfield early morning (faces East) in ice."

The notes, transcribed from a pocket tape recorder carried during photographic expeditions, are really about the 'ones that got away'. About the pictures not attempted because the hour or the season or the light was wrong.

One evening in December I look over the winter notes and decide on the beaver pond near Adamant.

The first steps in making a serious photograph are being totally prepared and equipped, and getting up and out early. The car is loaded that night with cameras - 4x5 and 8x10 - tripod, film - three times what I expect to use - toothbrush and two changes of wool socks. The socks are in case I step in a swamp, the toothbrush in case I decide to stay an extra day or two.

The alarm is buzzing at 5:00, up quick, open the draft on the woodstove so the big oak chunks, oxygen-starved all night and dehydrated to charcoal, can blaze wildly. A kettle of icy spring water goes on the woodstove for coffee and so does a skillet of bacon. It's too early for Vermont public radio - Morning Pro Musica begins at 7:00, so a recording of a Debussy prelude serves well to begin the day. By the time I'm union-suited, breakfast is about ready and before 6:00 I'm on my way with a thermos of hot coffee, a loaf of bread, a jar of peanut butter, and three cans of fruit cocktail. On those items and the extra socks, mountains have been climb

I head for Adamant the fast direct paved way. It's dark and will stay that way for an hour, so there's no use getting lost -- yet! I have 75 miles to go and at first light I get off the black top and onto a dirt road that goes sort of in the right direction. Now it's time to get lost, and immediately I am. Although the beaver pond is the goal, the starter, the excuse and I know I'll make good pictures there, there's no rush. The light on flat surfaces, like beaver ponds, is good at any hour of a December day because the sun never gets up very high.

The best pictures, the bonus pictures, the special gifts and delightful surprises come most often, I think, to him who is lost. So I drive along the bumpy woods road on a hunch and it's just a lot of uninteresting scratchy brush and second growth wood lot and then suddenly it opens up and oh my! An abandoned granite quarry. The opposite

wall is just being tickled at the top by the early sun but there's enough light to see...that it isn't granite at all; it's slate...

A lot of photographers fail repeatedly because they don't know which subjects, shapes, textures, tonalities, events, rhythms, or qualities of light synthesize with the photographic medium and which ones don't. A few impossibilities come to mind: backlit anything, but especially portraits (in which the fleshtones always look like a dish of mud), covered bridges (which contain all the excitement of shape inherent in a brick), prints of Mount Rushmore, Yosemite Falls, and the Grand Canyon from 35mm negatives, garbage cans, drunks, ladies wearing tight, wet, torn, or unbuttoned shirts, doorknobs, puppies, "S" shaped anything, swans, empty chairs, diners, pussycats, anything printed on #6 paper, through a diffuser, a texture screen, or larger than 11x14 (unless you happen to be Ansel and the negative happens to be at least 5x7).

Slate photographs magnificently. Quarried slate will glow in intricate, delicate, abstract patterns and tones beyond imagining. The material is black as midnight, but in direct sunlight the myriad smooth curves reflect a thousand nuances of tonality that form wild random shapes. I want it all, but to get it I must first see it all in intricate detail. For this kind of work you need a big ground glass to see in and a big negative to print from. In a moment the 8x10 is set up, focused, and an image is roughly composed. Final refinements of framing and focus must wait until the sun comes up to sculpt the forms. Just wait awhile. The snow crunches under your feet, your breath hangs in the clear still air and steam climbs from the stream of hot coffee gurgling into the plastic cup.

In a few minutes I'm going to make a hell of a picture. Maybe two. That business on the left where the snow path is flowing down the gully looks like a blazing white panther snaking down a black

velvet wall and it might work as a vertical with a long lens. With nothing to do but wait for the light, I walk forty feet toward the gully and in a few minutes have a workable camera position figured out and marked on the snow with a pair of crossed sticks. Back to the camera to wait.

It occurs to me that no viewer of my photograph of the quarry wall will ever derive as many good juices from the experience as I will. I am there to enjoy the first thrill; surprise and recognition and the anticipation of the light which will surely come to transform the subject, the excitement of working out the composition -- the architectural assembly of the image. The photographer decides what to leave in, what to take out, what's happening in the corners.

Quite suddenly the whole face is awash with the wondrous first light and it's glowing and flaming like a live thing. It is magnificent; it's Bach and Leger and Nevelson and you are there. What delight to quickly refine the focus and composition and watch the image snap onto the ground glass with such crystalline clarity that it seems to tingle. A little science next...nothing tricky. You know that early winter sun requires $1/8$ second at $F/32$ for a realistic rendering and the meter confirms it. I make two exposures. At \$1.00 per negative plus a quart of developer, you don't go snapping an 8x10 frivolously but at the same time there's nothing more bush league than not getting the picture because of a mechanical or human failure or a manufacturer's defect in a negative.

No time to waste now. Rush the gear to the crossed sticks, set up carefully and compose. No good. As I'd suspected, there's too much stuff showing with the 10" lens. Change lenses. The last picture was about chaos -- like the jumble in a pirate's jewel chest -- but this is of that one simple, incredible white form against the black. Isolate, simplify within the concentrated rectangle of the long (19") lens. Fine now, but a little

tight so I pick up the two hind legs of the tripod and start backing up, watching the glass as I go. Ten feet back the shape becomes comfortable in the frame. Look at Strand's work. He was always in the right place, never crowding or leaning over his subject but always "close." You can't teach that. Drive the tripod feet into the snow, level the camera, arrange the image precisely in the frame with the rising front and focus carefully. The opposite of exact is lazy. Do it right. Do it so you can deliver a superb negative to the poor devil (you) who has to print it. The light's the same so close the shutter, cock it, set $1/15$, and stop down to $F/32$. (This is a vintage Acme shutter and a setting of $1/15$ is needed for an actual exposure of $1/8$). Although all my shutters are winterized -- lubricated with graphite instead of oil -- I still warm them up by cocking and releasing 4 or 5 times before each exposure in cold weather. Now film holder in, slide out, expose, slide in, holder out, turned around, in again, slide out, another exposure. All done and both pictures of the vertical surface made during the ten minutes of best light. (Both of these worked out nicely and so did two from the beaver pond made later that day. They will be at Helios Gallery, 18 E. 67th St., N.Y.C. with about 80 others for a month following a reception between 4:00 and 6:00 on February 14. You are invited).

Now to pack up and get lost some more and finally arrive at the beaver pond where the light will be fine all day. If the weather holds, it might very well be a sound idea to stay up in this area and "work" for a few more days... And that's the reason I bring three times the film I can possibly use.

What I was wondering about at the outset was whether I could hold your attention and transmit something of the excitement and joy possible when making a photograph you care about. I hope I did.

Last summer I was lucky enough to buy a wonderful house on 50 lovely acres in Dummerston. The place was originally part of the Bunker Farm where I worked summers when I was a teenager. The house and barn were built in 1787 and were in poor condition but with the help of some skilled and sympathetic people, restoration is progressing and soon we will install the darkroom and workroom from scratch. This is an opportunity to create an ideal working environment without compromise of any kind.

In the next Newsletter I will describe in detail the equipment and measurements, plumbing, electric, lighting, all dimensions, costs, and I'll include specs for finish materials and any other information that might be of value to anyone planning such a worthy extravagance. Floor plans and elevations of the darkroom and the workroom will be included. Also planned for the next Newsletter is a description of test procedures and results of the new Ilford 35mm HP-5 film against Kodak's 35mm Tri-X.

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It has been a beautiful fall and winter. Lil hung an elegant show at Sarah Lawrence College in November and is already planning the first Zone VI Women's Workshop in July. Bern is working on next year's products and catalog and (hardest of all) on his skiing, while the ne'er-do-well makes a lot of pictures and writes an occasional Newsletter.

We all wish you joy for the coming year.

A handwritten signature in dark ink, appearing to read "Fred Pickers", written in a cursive style.

ZONE VI Newsletter

NEWSLETTER #17

April 1978

"I feel an artist should go about his work simply with great respect for his materials...simplicity of equipment and an adventurous spirit are essential in attacking the unfamiliar and unknown."

Alexander M. Calder

"It has WHAT?"

"We say it has 'midtone sparkle'," the technical representative of Ilford patiently repeated.

I had phoned the Ilford headquarters in New Jersey to get some of their new HP5 film for testing. While I had them on the wire, I spoke to their technical chief and asked him what the difference between the old Ilford ASA 400 HP4 and the new ASA 400 HP5 was. The above absurdity and 'better grain' was his answer. I asked him about curve shape and drew a blank, but was assured that the new film has 'good contrast' and 'excellent shadow detail'.

I'm no film tester. Photographers have no time for that sort of nonsense. I have used one film and developer combination for a dozen years and think that I am just about getting the hang of its idiosyncrasies, nuances, strengths and weaknesses. I wouldn't dream of changing unless the product I use goes bad.

Anyone who uses two films will never master either one. That's not only because physical speeds and curve shape are different; it is -- more importantly -- because the photographer will never get the feel of the material which results in solid confidence and eventual mastery. The photographer must always command his materials; the camera must never get the upper hand.

All of the great photographers simplify their technique and are completely consistent in its application. Amateurs jump from fad to fad, meter to meter, film to film, etc., endlessly. Vermonters, if asked, "What do you know for sure?" reply, "Nothing." That's what jack-rabbit photographers know for sure.

But I said in the last Newsletter that I'd test the Ilford HP5 and the reason was because I think the company that makes the last remaining decent paper deserves our attention. They deserve a film test.

There are many ways to check the quality of a product. Assume you were assigned to select footgear for warmth and comfort. You might write manufacturers for "R" factors or "specs" or thermal efficiency, etc. You could ask people who work in the woods all winter, you could wear a combination of boots, socks, innersoles, etc. one day, another combination on the next day, and so on. But tomorrow is warmer or colder than today, you feel better or worse, etc. There are no controls. Too many things are being tested. To remove all extraneous factors, why not put boot "A" with sock #1 on your left foot, boot "B" with sock #2 on your right, and start hiking. When one foot gets cold, put boot "C" on it with sock #3, etc. (I've done this and the champ is a Sorel boot with felt liner over a thin wool sock covered by a "Ragg" sock -- good for hours of standing around on ice at below zero temperature.)

To test anything in isolation is silly. You must compare it with something that exists. Only comparisons made under identical conditions are valid.

Decide what you are testing for. I'm not much interested in speeds of films if they are reasonably fast nor am I interested in microscopic examination of grain or resolution. That sort of 'objective scientific' criteria are for scientific types. My criteria for negative material are only what kind of print it can make. I want to know about the atmosphere of that print and how it affects the kind of work that I do. Test for what you do. Don't test with flash or floods if you don't use them. Don't test with resolution charts. You don't photograph charts.

Unfortunately, HP5 is only available at this time in 35mm. Film of any brand in 35mm is not a very good choice to test for quality because, frankly, 35mm does not have much. Most people think that Tri X is Tri X, whether 35mm, 120, 4x5, etc. Not so. The 35mm Tri X, Pan X, HP4 or whatever is always inferior to the larger sizes of the same brand and type for several reasons: Tri X 120 has a base density of about .08. (This varies slightly with the emulsion batch, the developer, length of development, etc.) Tri X sheet film base is .06,

but Tri X 35mm has a base density of about .30 so, without any exposure at all, the 35mm base has a density equal to a 120 film exposed to Zone II! Why is that a problem? Because the .30 base density of the 35mm film is working against the paper curve for the low values. This means that you can't get the maximum black the paper can provide unless you expose so long in the enlarger that you grossly depress all the higher values. So, with 35mm you can only print for the minimum time for maximum black available through the clear film. You can't print for the maximum black of the paper.

Why have you never heard of this before? I don't know. Last summer, on the last day of the alumni workshop, I was having lunch with Dr. Alan Borrer of Polaroid. Alan is not only a technical whiz (no 'mid-tone sparkle' from him) but, like so many of the Polaroid folks, he is a very gifted photographer. I mentioned that people often sent maximum black test strips of 35mm and asked me to identify the strip of maximum black. But I never could find real black in the area on the paper that was covered by the film. The exposures would get down to a dark gray and subsequent exposures would stay the same dark gray while the uncovered paper alongside the film strip and the small areas of the sprocket holes quickly achieved black. I asked Alan what that was about. He was unaware of the phenomenon because, like me, he uses a larger format. We went down to the lab, made test exposures on a strip of 120 and a strip of 35mm and there it was, plain as day. Total black through the 120 with ease, gray through the 35 regardless of the length of exposure. Alan then came up with the theory of the intersecting, or interfering, or opposed curve shapes of the paper and the film caused by the dense 35mm film base. I'm not good at following that sort of thing, but I'm good at what happens and what happens with 35mm is no black in the print. Try it. (Bulk film is worse. It has a .40 density).

There are other factors that reduce 35mm film quality. The physical thickness of the emulsion base is one. This thickness is necessary to provide the strength required to yank the material through the camera, sometimes with an electric motor. Thickness degrades sharpness. (See "Lateral loss of definition by a sharp angle of light on a thick emulsion" in Adams' "Camera and Lens," Page 100, Diagram 51B)

The physical factors of density and thickness are further compounded by the problems of a very small nega-

tive and the impossibility of getting the film really flat in the camera. Because of these limitations, I have found that it is best to keep 35mm prints in the 5x7 range. If that seems conservative, consider that a 5x7 enlargement from a 35mm negative is equivalent to a 20x30 enlargement from a 4x5 negative. People who tell you about razor sharp 11x14 prints of superb gradation from 35mm negatives are like people who tell you they have found wonderful things in thrift shops. Maybe they have or maybe it's a question of how you define wonderful.

Film for 35mm should be fast. Used for their designed purpose, 35mm cameras should be hand held. (If you have time to set up a tripod, you might as well put a 4x5 on it and get some quality). Hand cameras are usually used hurriedly to photograph moving subjects and, with the camera movement inherent in hand-holding, the subject movement, and the slow shutter speed needed for the poor light in which the work is sometimes attempted, you need all the film speed you can get.

How does HP5 compare with Tri X for speed? I taped ten inch strips of each film side by side to an 8x10 holder so that I could give them an identical exposure. I exposed on a black card in shade, placing the reflectance so that I would get a Zone II density for the Tri X. Then I turned the holder around and made another Zone II exposure on another pair of strips. I chose Zone II so that if HP5 was slow I'd at least get some readable density. One pair of strips was developed in Kodak's HC 110 and the other in Ilford's recommended Perceptol. The results in both developers were the same. The base density of both films was .32 but the Zone II placement produced only .42 density (Zone I) to the HP5. The Tri-X density was .50 which is a proper Zone II. No chance for error; the films received identical exposure and were developed together. The densitometer used was a \$1,500.00 Macbeth and it was checked against a calibrated step wedge before and after each reading. No question about it, HP5 is a full stop slower than Tri X. Actually more than a full stop because a subsequent development time test showed that the HP5 was wildly contrasty at Ilford's recommended development time. Development time, therefore, had to be cut sharply to get a printable Zone VIII. The result was the same as when film development is drastically shortened for condenser enlarger printing -- the low values mush together and speed drops appreciably. In summation, HP5 is a low speed film with poor low value separation. Actual photographs show that this film has

a lot in common with Plus X. No contest against Tri X.

What's going on here? How can both films be rated at 400 when they are not the same speed? If they were the same speed, why does the Ilford "Exposure Guide" that is packed with the film suggest an exposure of 1/250 sec. at f/16 for "sunshine, blue sky," while Kodak suggests 1/250 at f/22 for "bright or hazy sun (distinct shadows)"?

Both suggestions are wrong. I have never seen a situation of such brightness that 1/250 at f/22 would not guarantee at least a one stop underexposure. That same exposure -- 1/250 at f/22 -- which Kodak also recommends for "hazy sun" will give you a $2\frac{1}{2}$ stop underexposure!

It's mind-boggling to contemplate that a company with the wit to make \$163,000,000.00 profit in 1977 thinks that bright sun and hazy sun produce the same reflectance and therefore require the same exposure. Don't they have a meter?

They think Tri X is 4 stops faster than Pan X and illustrate the error not only numerically -- ASA 32 against ASA 400 -- but by their exposure recommendation. But the difference is only two stops. Try it. Why hasn't Kodak tried it?

Polaroid Type 52 is also rated at ASA 400. It is a fact that if you make a good print with 52 and then substitute a sheet of Tri X in the same (view) camera and give it the same exposure, you'll be $1\frac{1}{2}$ stops underexposed on the Tri X. In Easter Island, my normal procedure was to make a photograph on Polaroid for record and to check composition, focus, etc., then open up $1\frac{1}{2}$ stops and make a Tri X negative.

How can these films -- HP5, Tri X, and Polaroid 52 -- all be rated 400 and yet have an actual speed difference that is greater than the actual speed difference between Tri X (400) and Pan X (32)? Who checks that? Does the ASA (American Standard Association) just take the manufacturer's word? Why?

In summation, if Type 52 is an honest 400, and I believe it is, then Tri X must be 250 and HP5 (with the short development time) is about 100.

It is with considerable difficulty (and the certain knowledge that Lil and Bern -- the Madame Defarge and Genghis Khan of editors -- will slash it from my manuscript, as they do all my best stuff) that I omit the observation that film makers don't know their ASA's from their elbows. (Ed. note: In a bid for your sympathy, which we so richly deserve for living with this sort of thing, we decided to leave it in. L & B).

*

"I feel that if one accepts things which one does not approve of, it is the beginning of the end, and by and by you get more things of a similar nature."

Alexander M. Calder

I just got some highly touted "Argenta" paper from that company in Munich. It's weak gray stuff. No whites, no blacks. It's like Brovira. Still, most people would not know the difference (they buy RC, don't they?) and Zone VI could have been the sole U. S. importer of Argenta and made a pocket full of money selling the stuff, but if we don't use it we won't sell it. Maybe Ilford will get sore about the HP5 film test and stop selling us paper. Who cares; we'd still tell the truth as we see it and sell only what we believe in.

The last Newsletter promised a description of the new darkroom but I'll have to delay that because the fellow who will draw the plans had to go to England.

There is a subject I've been avoiding that has bothered me for a long time. If this were a magazine article it would probably rate a Madison Avenue title like "Zone System Revisited." What bothers me is simply that my book, "The Zone VI Workshop," explained Ansel Adams' Zone System in such simple terms that everyone -- the inexperienced, the lazy, and the unmechanical -- could understand it. So far so good. But then bad things happened. I got crazy letters..."because of your book I have decided to go into the Zone system in depth, exchange my equipment and redesign my darkroom..."every time I do a film speed test it comes out better..."I've decided to go into Zone photography" What are they talking about? A Zone Cult has formed. It's ridiculous and Ansel would be the first to agree. The technical part of the Zone System is (mostly) to get the right exposure so that you can get the desired tones in the print.

Think. There are only two things you can do wrong (technically) when making a negative: (1) you can expose it wrong and (2) you can develop it wrong. My book tells you (1) how to expose it right (all my exposures are fine) and (2) how to find your developing time. That's all there is to it! There's not one more thing to do except photograph. But writers never seem to get done writing about it and Zone nuts seem committed (should be?) to spending the rest of their lives making meaningless tests. Remember: (1) if you expose so that Zone I reflectances in the scene appear as Zone I densities in the negative (about .10 above film base) and (2) develop so that Zone VIII reflectances in the scene appear as Zone VIII densities in the negative, that's all you can do. If you learn to do it consistently like every accomplished photographer does, you are free of doubts forever and can go on about the real business of photography.

That's what my Zone VI book was written for -- to simplify the simple and to enable people to get past technical hogwash and get on with photography. But the idea backfired; the book and the Zone System became an end in itself, and I became known as a (gulp-ugh) "technician" who contributed to the unprintable density of a bunch of technical freaks.

*

"Having a lot of equipment dedicates you to its use. You go off in the direction your equipment carries you. You should set limits. The trouble with a lot of artists is that they have too much technique. They don't know what to do with it all. If you cut down on it you can work more strongly within narrower limits."

Alexander M. Calder

The above quote made me think of Susan Barron. For her own work she uses a battered Calumet 4x5 camera which cost under \$150.00 when new and one lens of undetermined origin. She produces some of the most beautiful photographs I have ever seen and no one prints better than Susan. She is a member of our workshop staff and is currently in Orgeval, France, where she is printing a number of Paul Strand negatives.

My publisher wants an "advanced" Zone VI Workshop (or Book II, etc.) Not a chance. If everyone would merely follow (exactly) that little "Zone VI" book, they

would know all they need to know, all I know, about making a (technically) good negative. So I told the publisher that the last thing that's needed is an "advanced" i.e., needlessly complicated and practically useless though undoubtedly profitable, Zone Book.

What is needed are more books on the aesthetics of photography such as "Looking at Photographs" by Szarkowski.

What is needed is a book on composition. Not rules of composition, but approaches to the utilization of space in a dynamic and individual manner. A technically correct 8x10 negative printed on Ilfomar and gold-toned won't make a beautiful photograph out of a static composition.

"Disparity in form, color, size, weight, motion, is what makes a composition... It is the apparent accident to regularity which the artist actually controls by which he makes or mars a work."

Alexander M. Calder

What is needed is a book on light. There are dozens of qualities, directions and intensities of light that many photographers don't even consider when they make an exposure. What good are the right Zones in the wrong light?

What is needed is a book on exactly where to put the tripod. Not many seem to know much about that little problem. I have looked at thousands of student pictures -- we get about 1,000 prints at each workshop, 3,000 each summer -- and practically every photograph could have been visually strengthened if it had been made from another camera position. Proper exposure and proper development won't save a picture made from the wrong camera position.

I tried to write the above books. I tried to get them into one book called, "The Fine Print;" tried to raise the level of present day photographic writing above the "How to" level. When I read "The Fine Print" over recently with an eye to revision, I decided that I had really said exactly what I wanted to say in the best way I knew how. But "The Fine Print" doesn't sell very well compared with "Zone VI." Why? "The Fine Print" is a far better book than "Zone VI." It's a book I wish I'd had when I started out. "The Fine Print" explores the 99% of photography that's hard while "Zone VI" gives a simple prescription for the 1% of photography that's easy. Maybe that's why.

So, if you're a Zone nut, think things over. You can just keep trading your camera for one with more 'features' and you can mess with photo toys until you're poor and you can read all the "How to" writing for the rest of your life and never make a photograph worth a second look -- equipment buffs and technique freaks are the visual equivalent of the tone deaf -- or you can give yourself a chance to be a photographer. Put things in perspective. You already have more equipment (photographic) than Strand and Weston together. Think about what there is in the world that you care about and search it out and with your unique vision photograph it over and over 'til you've said what you want to say about it. Work. Remember that Weston's great pepper photograph is entitled "Pepper #30" and that neither he (nor Atget, nor Stieglitz, nor Curtis, nor Hill) ever heard of the Zone System. It took Weston 30 exposures, not to expose it right, but to see it right. The picture is great because Weston was great. In summation, if my little book in some way helped to create a Zone monster, the above is at least an honest attempt to put him in his proper, relatively unimportant, place.

Over three hundred people came to the reception on February 14th at Helios Gallery in New York and it was quite a festival. The gallery did everything in elegant fashion. The matting and framing of the prints was beautifully handled, the lighting was fine, there were flowers, and a real New York type liquor bar. Lots of workshop alumni showed up which was nice even if I was so numb that I couldn't remember anyone's name. Sorry. The high point of the evening for me was when a beautiful lady arrived, gave me a hug, and said nice things about my photographs. Then she said, "I wish Paul could have been here." Hazel Strand had said what I had been thinking all evening.

It's good to have a show now and then. For me, it serves to mark the end of a body of work. Although getting exhibition prints made is time-consuming, as is selecting and sequencing, it can be a time of valuable review. Finally, a body of work is all together in first class shape and can be seen as a unit. The pictures don't seem like yours. Suddenly they are up and walking around with a mind of their own. You can see a blueprint of what you have been doing in the past and, if you're lucky, the work may indicate one or more directions to be explored in the future.

At workshops we stress the importance of working

towards a goal at all times. Strand told me that all of his later photography was done with book publication in mind. I've assigned myself projects such as illustrating poetry, documenting a particular place, or exploring particular subject matter. I've been involved with beaver ponds for the past year and am currently eyeing quarries. Any upcoming show is surely a project.

Design a project for yourself. You might assume that you have a show coming up. Choose a theme. Set a definite date. Decide that the show requires a specific number of prints (all to be new work) that you can realistically expect to complete in that period of time. Ten to twenty-five, I'd say, but pick an achievable number and write it and the date of the show on your dark-room wall.

Go to work. If, on the projected date, you have the prints well made, toned, spotted, mounted, and sequenced, you will have accomplished and learned a great deal.

Edit ruthlessly. If a picture is weak, pull it. If a print can be improved in the slightest degree, re-make it.

Now you have a representative portfolio. Put it in a salon case with slip sheets between the prints, make an appointment, and visit a gallery. You just might get a date for a real show. If not, you at least have a nice portfolio and that's a lot better than a Polycontrast box stuffed with wrinkled prints and surrounded by explanations. More importantly, you have created a coordinated body of work against the background of a deadline. You will have learned much in the process.

Don't be upset by rejection. Considering some of the stuff accepted today, rejection could be a compliment. And it doesn't matter; doing it is what matters. Alexander Calder said, "I have developed an attitude of indifference to the reception of my work which allows me to go about my business."

Follow through anyway. Hang the show in your living room, the local High School, the "Y", anywhere. My first one-man show was in a movie lobby and that was not a bad thing. Thousands of people saw it and I learned a lot and felt good about it. Seeing a body of your work together is a very worthwhile learning

experience. Patterns can appear with embarrassing clarity or with indications of directions to explore. Single photographs can be turning points; three or four I've made have influenced all the work that followed. Your pictures, if made with direction and seriousness of purpose, can teach you if you will assemble them and spend time with them.

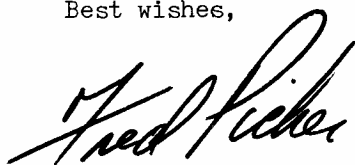
You've probably divined that I've been reading Calder's autobiography. It is, as he was, wonderful. It's called "Calder, an Autobiography with Pictures" and the publisher is Pantheon Books, New York.

I can't resist one more quotation, a description of his work by his son-in-law, the sculptor Jean Davidson. It appears in the introduction and might not be out of place tacked over a darkroom door.

"Spectacular as it is, there are no shortcuts, no tricks, no recipes, no mystification, in Calder's art. It is the ultimate evolution of an individual sincerity. The only formula -- probably the most sophisticated of all -- is innocent simplicity. It is a rare commodity and the only one that remains as fresh and refreshing in a man nearing eighty as in the adolescent of twenty, sometimes even more so.

"From Calder's straightforward simplicity sprang forth the most exquisite, intricately balanced and shaped works of art of this century, over-reaching the wide horizon like the rainbow. His innocence re-created a thousand solar systems, while from many a cunning brain and complex personality banality alone surfaced."

Best wishes,

A handwritten signature in black ink, reading "Fred Fisher". The signature is fluid and cursive, with a large, sweeping "F" and "S".

P. S. A couple of things that should have been mentioned in the flyer regarding set-up and use of view cameras:

1. When you withdraw or insert the film slide, put your left thumb against the groundglass, your fingers over the camera back, and squeeze. This will prevent you from inadvertently pulling the camera back open a crack and allowing light to streak your negatives.
2. When making a vertical, always leave the focusing cloth, a hat, etc., over the camera to keep direct sunlight from striking the light trap of the holder. Same is true for horizontals if the sun is low and to your right.
3. To check for light leaks in the camera, take it in the darkroom, remove the lens, and stick a flashlight in. Naturally, there must be a film holder inserted. If light leaks between the camera back and the film holder, touch up the high spot on the camera back with emery paper until the holder fits snugly all around.
4. To locate a leaky holder, drill a tiny hole through the track that holds the film flat. A black spot will appear in the film edge at that point. In the next holder drill two holes close together near a corner, then two wide apart, etc. Every holder will have a different pattern of holes and the edge of every negative will disclose which holder was used.

The workshops for 1978 are fully subscribed. There are sometimes personal or business contingencies that force a few late cancellations, so we accept some stand-by applications. No guarantee, but probably a fair chance if you act quickly.

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ZONE VI Newsletter

NEWSLETTER #18

July 1978

"Work in Art may be a happy even delightful sentence, but it is work not play and you invest your life just as an athlete does."

Picking Winners, a talk at
Indiana University, Oct. 1973,
Henry Holmes Smith

When I bought the old house in Dummerston, I decided that all planning of living and work spaces would be the result of past experience. Tradition would be ignored. Among the first traditions to collapse was the "parlor" syndrome in which the most attractive part of the dwelling is reserved for special occasions. The opposite side of that coin dictates that the most unattractive work be relegated to the most unattractive space. That was the arrangement in my former house. My workroom, where the "unattractive" work of cataloging, filing, spotting, mounting, packing, etc. goes on, was down the stairs in the basement. Although the location of the darkroom doesn't matter much, doing dull work in windowless basement space is very unpleasant.

THE WORKROOM

My new workroom occupies the former living room of the house. It has glass on two sides with lovely views, a paneled fireplace, a music system, and a high ceiling of ancient beams spanned by 20" wide white painted plank. The impression is of bright spaciousness; an attractive place for unattractive work.

One corner of the room contains a desk and typewriter. I used to have to go upstairs to type a shipping label, get stamps, or write a note. Two walls of the room are occupied by work tables. Consistent with the philosophy of the most attractive space for the dullest work, why not the finest furniture for the most

use? Since I spend much more time in the workroom than in the living room, I had work tables executed in solid cherry by an outstanding cabinet maker. They are a pleasure to look at and to work on and they each cost more than a Zone VI camera outfit. (It might be best if married men stopped reading about here.) Their dimensions are 7' long x 30" deep x 40" high. I'm 5'9", so taller or shorter people would adjust for height.

The work tables each have four drawers measuring 6" high x 18" wide x 24" deep. In them, dry mount tissue, mount boards, slip sheets, spotting equipment, wrapping materials, finished prints in groups -- a fifty print show can fit in one drawer -- glass for frames, frames, and on and on, can be stored. Drawers are coated inside with polyurethane varnish as are the work tops. Under each table is a full length storage shelf, slatted for lightness of appearance. These store bulky items such as wooden shipping crates, negative files, lighting equipment, print cases, light boxes, etc.

Lighting in the workroom is by Lightolier "Litespan" 8' tracks over each work table. These carry movable swiveling "bullets" that are easily adjustable for spacing, directional angle, and number.

Over one of the tables is a pair of racks mounted to the wall where a group of about 18 prints can be observed simultaneously. I think a display wall with good lighting is about as important as any item of equipment that a photographer might own. Only with a display wall can you live with a group of new prints for a while, see patterns emerge, watch the weak ones wither and, with luck, watch the "survivors" increase in stature. It takes looking time for this natural selection to take place and you can't do it if the prints are in a box. At Putney School, where our workshops are held, we have a large gallery and each student is assigned a section where he displays his work. Many have never seen their work displayed in that way before and they are usually gratified and encouraged by the experience. The point is that you must know your work in order that you may grow and you can't know it if you can't see it.

Indicative of how strongly I value a display wall is the fact that I have devoted more space to two strips of molding than to a description of the rest of the room.

The work sequence proceeds like this:

1. Unmounted prints are flattened and dried in a dry mount press located at the right side of the right hand table.
2. The prints are taken to the left end of the left table where dry mount tissue (stored in the drawer under that position) is tacked to the back.
3. The prints are moved to the right and trimmed.
4. The prints are carried to the second table which has a dry mount jig at its left end. The prints are tacked to the mount boards here. (Boards are in the drawer under that position and there is a second tacking iron at that place.)
5. Prints are stacked to the right to await their turn in the press.
6. Prints are returned to position 2 to be inspected and spotted.

If the above all sounds horribly mechanical and assembly-line like and stifling of the creative juices, it might be worth considering my reason for this sort of rigid approach to routine (non-creative) work. My experience is that a lot of photographers have it backwards; they are creative where they should be mechanical (every time they develop a film it's a new adventure) and mechanical where they should be creative. My approach keep the mechanical aspects (there are a lot of them in photography, from mixing developers to packing prints) as mechanical, repeatable, dependable, quick, and simple as possible.

Save the creative juices for the creative acts of making pictures and making prints.

THE DARKROOM

My new darkroom violates more traditions than the workroom. Measuring 10' by 15', it is far too big according to accepted standards. Stuff I've read about darkroom design seems unduly concerned with cutting down the number of steps you take in making a print. A big item

is maintaining a short distance between the enlarger position and the sink. The way I print -- about 15 trips between the enlarger and the sink during a session -- I can stand to take an extra step. And the feeling of space brought about by the $5\frac{1}{2}$ foot distance between the enlarger table and the sink is very pleasant.

The dry side is furnished with cabinetry of the same quality and style and made by the person who built the workroom tables. Tradition has it that tops be Formica. If you, like me, hate to eat off it, why should we print off it? The enlarger table top is cherry as are the drawers. It is beautiful to look at and luxurious to work on.

There are 12 drawers in the enlarger table. Each is 15" wide by 20" deep but they vary in height from 6" to 12". Each drawer is labelled with what it contains; not so much to help me find something as to tell me where to return it. Everything has its place, from a #1 pencil to a dozen clean towels. I don't want to think about where something is or rummage through drawers. I want to think about printing. For the same reason, the darkroom is bare. There is nothing hanging on the walls or lying about on table tops. When I print there is nothing in view except:

1. The box of paper I'm printing from.
2. A #1 pencil for writing on the back of the print.
3. An easel or contact frame.

The card for test strips, the dodging tools, and the card with hole for burning are kept in a drawer until needed and then returned after use.

Why this persnickety paranoia for neatness? Would the print be any worse if there were three boxes of paper on the table? I think so, and if I think so, it would be! As important as the mechanical error you could make of pulling a sheet from the wrong box is the attitude of precision stimulated by these procedures. This approach frees me from annoying mechanics so that I can go ahead with the important business at hand with a clear mind. It is a fact that you can give maximum attention to only one thing at a time so why think of which box of paper to use or be distracted, no matter how slightly, by a scissors lying on the table? My friend Wes Disney puts it well.

He says he can't print without the right 'head set.' He says he can't print unless he has made his bed! That's ridiculous, but I have to shave...

So no distractions in the darkroom. Everything in its place and out of sight. No gadgets. No music. No chairs or stools. If you're too tired to stand up, you're too tired to print. I don't smoke, but if I did I wouldn't in the darkroom. (The American Cancer Society has shown that cigarette smoke is not archival.)

Another tradition has it that darkrooms are painted gray. Why? It's dismal and cuts down the efficiency of safelights. Why not white? I mentioned this to someone once and he opined, "Too much glare." Maybe, if you shone a 1,000 watt flood at the wall, but there's no problem from the reflection of a safelight. The white looks bright and clean and gives an impression of greater spaciousness. I used Moore's Satin Enamel latex which is a very washable non-yellowing paint.

On the floor I used a spongy backed white vinyl covering, but it's not as spongy as fatigue mats, so I put fatigue mats on it. That was a waste of money; buy regular vinyl and use mats. The floor is white, also. Well almost; it has white hexagons of "Spanish tile" embossed on it but was the closest to plain I could find. It is my suspicion that art directors design floor coverings at night.

The stainless steel sink is 11' long by 30" deep. This is excessive for normal use, but I make thousands of "Fine Prints" for Zone VI every year and they are made in quantity in 16"x20" trays with working space between them so that two people can work side by side. At the right hand end of the sink are a "Washing Machine" for print storage and film washing and an 11"x14" print washer.

The plumbing progression is, from left to right: Hot and cold copper lines come into the room. The first fittings are shut-offs, then a filter on each side. The first outlet is 32" from the left end of the sink and is a normal kitchen-type hot and cold mixing valve for washing up and mixing chemicals. The next outlet, 28" to the right, is a temperature control faucet for making up working solutions. The last outlet is another temperature control unit with two outlets. One goes to the washing

machine; the other to the print washer. The line to the print washer contains a Solenoid valve which is connected to one of those units that turns your lights on and off to signal burglars that you are away. With it I can set any kind of wash sequence and shut-off. I usually set a one hour wash followed by a one hour wash during the third and sixth hours. That saves some electricity, some water, and in a stand-up washer like the Zone VI Archival which washes just about as well whether the water is running or not, the intermittent wash does a fine job.

Many people think you can agitate the hypo out of prints mechanically or thrash the hypo out with a great rush of water, but the truth is that the hypo must leach out chemically over a period of time. This can't happen unless the prints are in a vertical position. In a horizontal washer, the hypo-laden water just layers itself between the prints. Perhaps in a future Newsletter I'll describe at length some experiments I performed. One utilized a clothes washing machine to wash one print and another subjected a print on the end of a string to one-half hour of flailing about in a rushing brook. Neither was effective. You just can't wash a print in $\frac{1}{2}$ hour.

There is an 11' shelf under the sink and on it are stored trays and jugs of chemicals, sheet film rack, and, at one end, a dehumidifier. High in the wall at the far end of the room is a small air conditioner. I doubt if I will use it often when I'm alone, but during workshops there are nine or ten students at a time watching printing demonstrations and it could get uncomfortable in August.

The traditional "light-proof" fans and louvres couldn't ventilate a closet. I had a section of sheet rock, 3' long by 6" high cut out along the floor of the workroom. Another section is cut out 40" above it on the darkroom side of the same wall. The air comes in from the workroom at floor level (the coolest air), through a dust filter, up through the partition, and out under the enlarger table top. The sheet rock was painted flat black inside. No light gets through, as opposed to those \$50 "light-proof" louvres.

Above the hypo tray position there is a grill about the size of the air intake space, 6"x36", that exhausts through the eaves of the house. The eave space is

sealed off except for a large (1,200 cubic feet per minute) louvered exhaust fan on the outside of the house. Because the air is nowhere restricted, as in a pipe, there is no air noise at all. The fan switch is a rheostat and can be adjusted for speed. At full speed the air is completely changed in one minute.

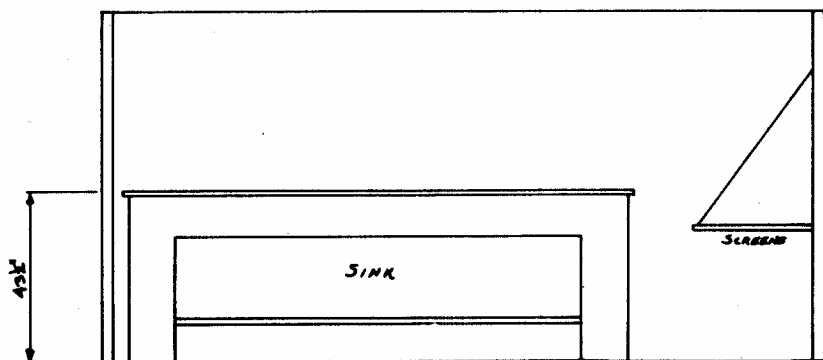
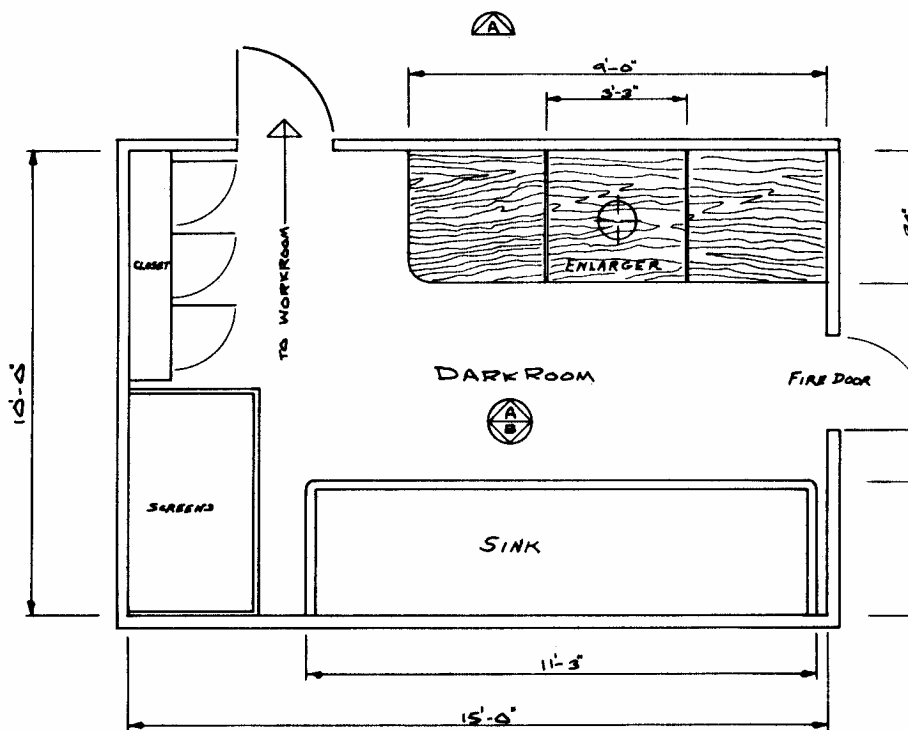
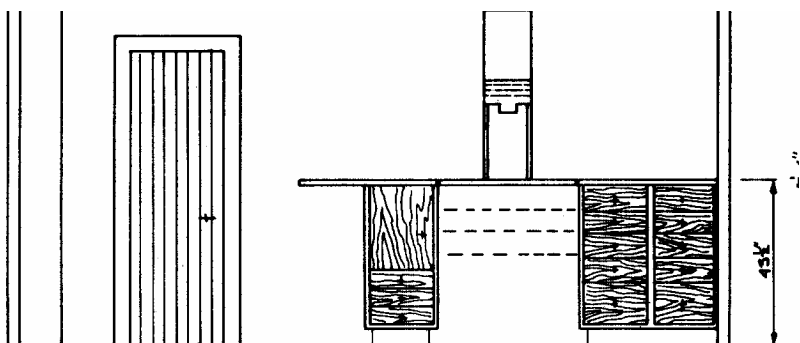
Another tradition dictates that prints are not to be dried in the darkroom, but that's where my screens are. I don't feel strongly that they should be dried there, but I have the space, it is convenient, and I have no concern about splashing anything on them. The racks are about 8' from the nearest tray. The dehumidifier keeps the humidity down and speeds drying.

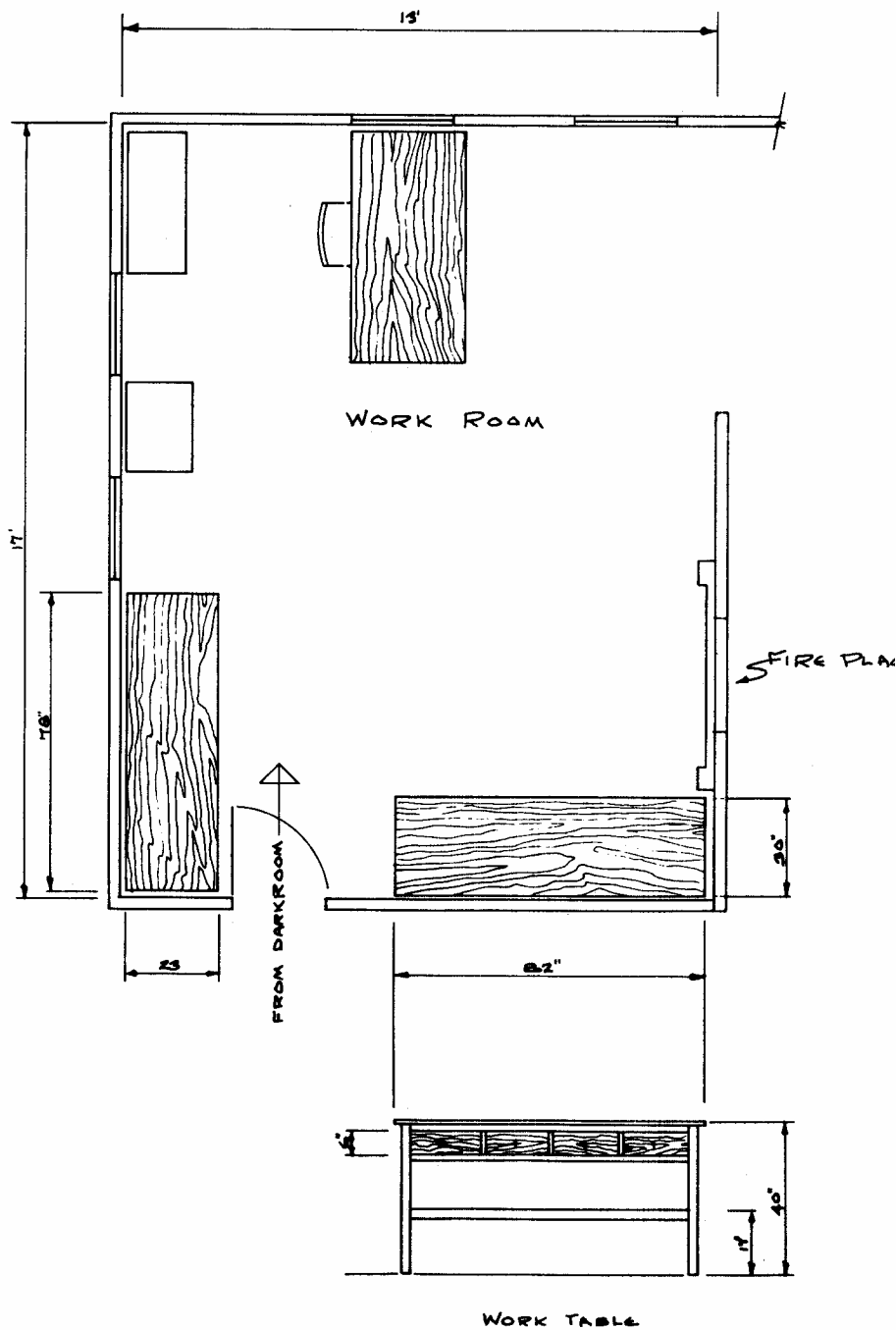
Speaking of drying prints, I have added an item you may find of interest. It solves the dry-down problem by showing you quickly what a dry print will look like. It's a woman's hair dryer. With it you can make a test strip or pilot print, fix it for a minute, rinse it off, squeegee out as much water as you can, and dry it on a screen waving the hair dryer around over it. Works fine and really helps to nail down those elusive high values. Don't use the regular drying screen; the unwashed print will contaminate it.

The safelights consist of several small lights but the main illumination is from one "Super Safelight" and the room is bright and pleasant. There is a large fluorescent fixture for general white light that's nice for setting up, washing down, cleaning holders, etc. This is augmented by regular reflector bullets over the counter and sink. These are used for inspecting and cleaning negatives, examining prints, and toning.

The enlarger is mounted to the wall for stability as described in Newsletter #16. A feature of the darkroom work table is that a section 38"x25" which is in the enlarger light path may be removed or lowered to several intermediate positions each of which is 12" below the last. This feature permits the use of long lenses for small negatives. A 150mm enlarging lens, for example, makes a gratifying improvement in 35mm image quality, but with normal enlarger set-up the maximum print size would be only about 4x5.

Although I haven't made a personal print over 11x14





in a long while, commercial accounts often order large display prints so the adjustable feature is desirable for that purpose also.

Focusing the enlarger by hand when the lamp house is five feet from the easel and you are bending over the grain magnifier is not possible (unless you have five foot arms) so a motor driven device with controls at the end of a line cord has been fitted. It also eliminates the backlash of some enlargers when the knob is let go.

To eliminate the usual clutter of wires, there is a slot in the top of the workroom table to the right of the enlarger. Line cords lead through it and are plugged in lower down and out of sight. Outside the darkroom there is a circuit breaker panel where the five electrical circuits can be conveniently activated or shut off together. All lights are also connected to insulated pull chains.

Equipment for film developing includes the usual stainless developing tanks for small film. Reels are removed from tanks after fixing, rinse, and Perma Wash and then placed in the "Washing Machine" for fifteen minutes.

Sheet film (4x5) is developed in 8x10 FR "Printrays." Large (8x10) sheet film is developed in 12x15 trays. The 4x5's are washed in a sheet film rack in the washing machine; the 8x10's in the print washer. All film is hung up to dry on a line of wooden clothespins stretched the length of the darkroom. Stainless steel trays are used for prints. Stainless is easy to keep clean but does not have the bottom grooves which are needed for negative developing.

Print developer is kept under the sink in the one gallon brown glass jugs which you can get free from any drugstore. I mix up two gallons at a time in a bucket, then fill one jug to overflowing. This airless container will stay in good condition for over a month.

Fixer is mixed from five gallon packages and kept in a plastic storage tank with spigot. This is also stored on the shelf under the sink.

To the left of the active door -- the one to the workroom -- there are three floor-to-ceiling storage closets. These contain film holders, quantities of dry

chemicals, scales, and large trays. The other door is a "panic" door only and will never be used as a passage except in case of fire. A windowless room with only one door feels like...and might some day be...a trap.

The photographs were made without auxiliary lighting except for one 60 watt bulb in a "bullet" reading lamp. The camera used was a Zone VI Field Camera with a 4x5 Polaroid back and a 90mm Super Angulon lens. The lens, as you can see, distorts perspective in close quarters, but to get the information needed for this purpose there was no other choice. The 90mm on 4x5 covers a field of view similar to a 28mm lens on a 35mm camera and provides enormous depth of field when stopped down.

Type 52 Polaroid film was used. For the workroom, I made exposure readings with all electric lights off. Daylight from two windows behind the camera and two more on the right provided soft low, but uneven, illumination.

I first made three stepped exposures on one sheet of film. The first was 20 seconds at $f/64$. Then I pushed the Polaroid envelope one-third of the way in, covering one-third of the exposed film, and gave another 20 seconds, another third of the film was covered and another 20 second exposure made. I had a "test-strip" print. It showed all values OK at 40 seconds except the drawer fronts, the floor, and the storage area under the table on the left. Those areas were too dark (underexposed). This was a result of the fall-off of the window light from the right. Light fall-off is the square of the distance -- there is not one-half as much light 16 feet from a "source" (window), as there is at 8 feet; there is only one-quarter. I decided to "paint" with light to bring the dark areas into balance. Now to find out how many seconds to "paint."

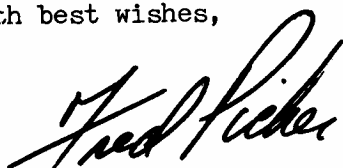
An assistant opened the lens while I made slow circles with the light beam over the dark areas. At ten seconds he slid the envelope one-third over the film etc. as before. The result showed that "painting" during twenty seconds of the forty second exposure would do the job. Then I turned on the seven overhead lights and metered the walls they shone on. I wanted that reflectance on Zone VII and the meter advised that two seconds would do it. But the forty second exposure strip showed a Zone VI print value for the walls, so one second (a

Zone VI added to a Zone VI gives a Zone VII) would do it. I gave the basic forty seconds including twenty seconds of "painting," closed the shutter, turned on the lights, and exposed for one second. That took care of the work-room picture with a minimum of fuss.

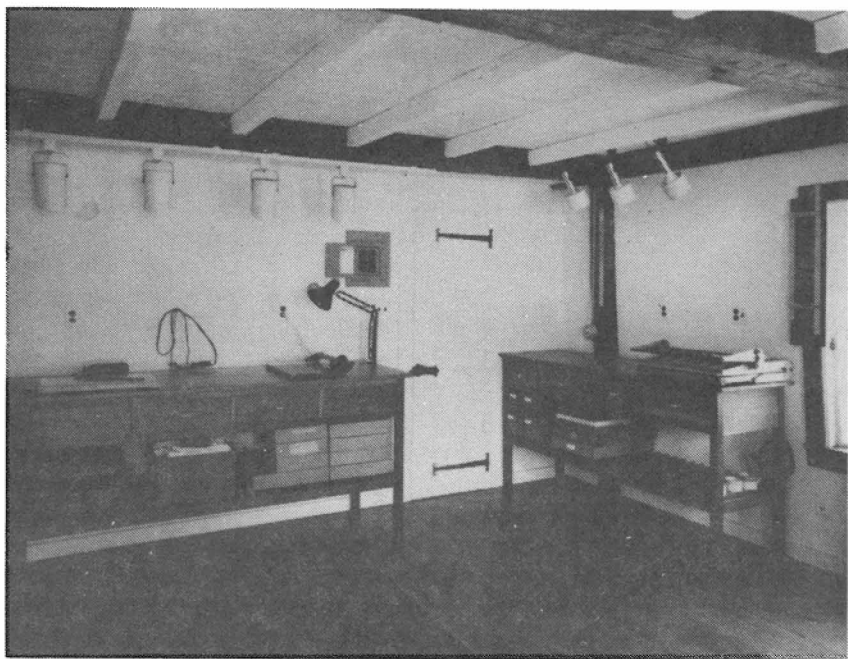
The darkroom pictures were even more fun. The area under the sink was "painted" for two minutes, then the overhead light was turned on for ten seconds, then the white lights in bullets were turned on for three seconds.

All this is so simple with Polaroid but it would take a mathematical wizard to work out the exposures with regular materials, and even then who would know how much real exposure is going on with the light moving around over the subject or how bad the reciprocity effect is with the long exposure? I once photographed a college auditorium with a single 1,000 watt flood light. It's easy if you work out a system, make notes, use Polaroid, and think! After you work out the formula, you can make an exposure on negative material. With reciprocity failure, don't be surprised if a Tri-X exposure needs three to twelve times as much exposure time as the Polaroid. I'd try three times, six times, and twelve times if the Polaroid time was under three minutes. If the Polaroid time was over three minutes, double the above.

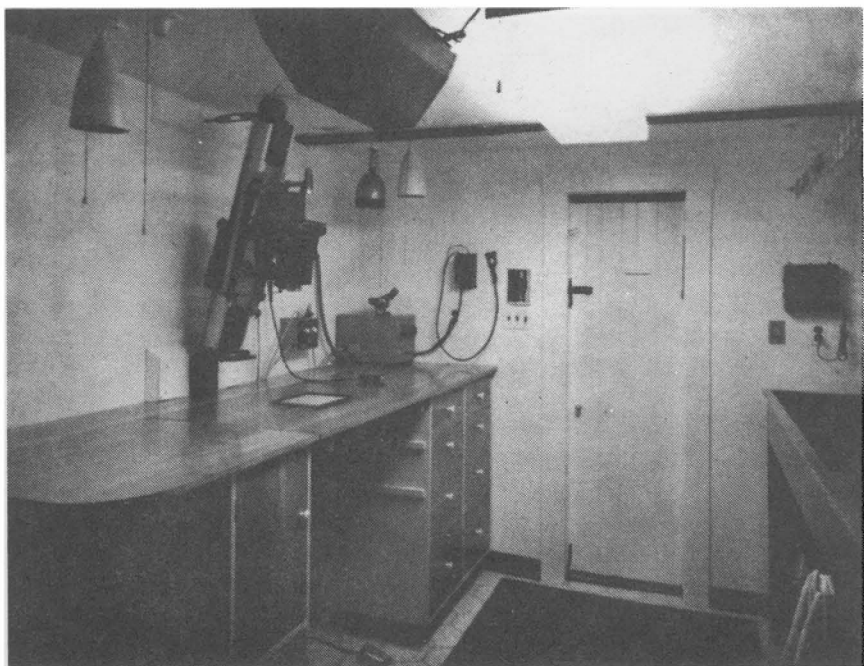
With best wishes,



Those who have inquired as to the availability of Gold Chloride, can send \$15 per gram to Auag Enterprises, 366 Orchard St. New Haven, CT 06511 Connecticut residents please add 7% sales tax.



Workroom: From left on table; dry mount jig with weight bag and brush, tacking iron, trimmer. The electric panel over the black lamp controls all darkroom and workroom lights and outlets. The right hand table holds the dry-mount press



Darkroom: Dry side, showing wall-mounted enlarger, the tracks to lower the work surface for making large prints, foot switch to timer, wall-mounted timer, "Codelight" control box with a grain magnifier (not a blackbird) perched on top of it. On the end wall there is a static brush and a fine portrait of Edward Weston by Brett. His expression says, "Do it right!" Yes, sir. Next there is the "panic door" and the edge of the sink.



Darkroom: Wet side. Timer used for print and film developing. Under it is a variable speed control for the exhaust fan. Next, incoming hot and cold water pipes with shut-off valves, then filters followed by a regular sink faucet, the first temperature control outlet (the "box"), and finally the second temperature control with lines to washing machine and print washer. Over the temperature control "box" is a storage rack for graduates, in the ceiling is the exhaust grill. Under the sink, chemicals are stored and there is a dehumidifier at the right end. The overhead wire with clothespins is for drying film.

ZONE VI Newsletter

NEWSLETTER #19
November 1978

Picasso was once told, "That doesn't look like a fish" to which he replied, "it's not a fish; it's a drawing of a fish." When someone told him, "I have never seen a sunset like that" he said, "What a pity."

"The camera, too, gives us not the object, but a sign for it written in terms of light and shade, indeed often at odds with the experience gathered through touch, smell, knowledge, or even an average human eye."

Jean Charlot, painter and
friend of Edward Weston

Dear Fred,

I have spent 21 of my 29 years in educational institutions of one type or another and presently attend numerous seminars for my profession (lawyer). I state this only to put my comments into some sort of perspective. Your workshop is, without question, the finest school of any type or any discipline that I have ever attended.

I was initially apprehensive about the staff, anticipating ego problems among the artists. I was delightfully surprised to find that situation non-existent. Your entire staff was a pleasure to know and learn from, as well as being accomplished artists.

I feel that, for myself, I came away with a new way of seeing things, particularly photographs. I attended the workshop with that goal and feel that my goals were satisfied. Although I haven't created any photographic masterpieces since June, I am certainly more aware of what photography is all about. Your school was invaluable.

Dana Strout, Denver CO

Dear Lil,

I have not written you sooner and thanked you for your part in the Putney Workshop because, as you told us, it took several months before all I experienced became clear in my mind. All the ideas are still sifting around in my head. A lot of us became very close friends up there and we're finding we still write and call each other with ideas and encouragement. How do you explain to folks at home that the staff taught us not only how to expose film and print, but much more important, how to see? Familiar roads have become new exciting friends. It's as if I never saw those places before.

Please don't change your staff members. You seem to have assembled the perfect group. They each are individuals who make their own special contribution, and they know how to interact with each other staff member and how to teach us.

I take fewer pictures now, but when I do they mean a lot to me. They are extensions of myself, almost like children to be fussed over, loved and protected.

I can never return what you, Fred, Tim, Dave, Wes, Susan and Martin gave me. It's been the most important gift I've ever received. To me as a photographer and to me as a person. Thanks again.

Virginia Woodward, Pompano Beach FL

Letters like those are most gratifying and we get a lot of them. Perhaps their greatest value is that they encourage us to do even better in the future.

Each year we attempt something new and ask for comments from the students. During this past summer, staff member Wes Disney, with the help of Fred Barstow of Polaroid, came up with a novel exercise.

THE POLAROID EXERCISE

Two groups of twelve students were assembled. Six Polaroid cameras were given to each group. Group "A" was taken into a parked school bus and instructed to make serious portraits of each other with the Polaroid cameras. The portraits were not to look like candids taken inside a bus. In desperation, Group "A" finally removed all the seats.

While "A" worked in the bus, Group "B" was issued cameras and told that the camera had only three adjustments: shutter speed, distance scale (no range finder), and a third device, unnamed. They were taken into a very dark room. Except for a few light leaks around the edges of shuttered windows and closed doors, there was no illumination. The assignment: make portraits.

Cries of disbelief were heard. "It can't be done," etc. But after awhile they figured out ways to "fool" the automatic camera into a one minute time exposure and to hold the camera and the subject still. "A" and "B" then changed places, etc.

Students learned that:

1. If any light at all is present, it can be made to reflect from objects and can be recorded upon light sensitive material to produce an image.
2. The photographer can and must control his equipment, his subject, his compositions, and his backgrounds.
3. Because of the instant feedback, Polaroid material is possibly the most powerful teaching tool available.
4. In spite of limited equipment and "impossible" conditions, application and brain power can win out.

Here are a few comments from the students:

"The limitations of making a portrait in the small space of a bus was a challenge that we undertook with all kinds of experimentation. Standing on seats, sitting on the back of them, lying on the floor, all were tried to avoid the appearance of a bus. We did come up with several quite acceptable portraits.

"What it really taught me was that one can, with determination, and in spite of limited equipment and conditions, make good pictures. It has underlined and made unmistakably clear that the greatest part of good photography comes from the imagination and persistence of the person behind the camera."

Bill Foster

"The Polaroid session was quite valuable as it represented a very definitive step in my liberation from my equipment. Fred and the staff made it quickly evident how much the camera, lenses, light meter, etc., were controlling my photography rather than vice versa."

Albert Lizarraras

"For the first time I realized how seldom I had experimented and how little I was learning from what I had done. Being forced into those extreme situations stimulated a keen awareness, and every exposure counted for some information. Suddenly, the problem and the knowledge that the photograph was possible were the only important things. The instant feedback from the Polaroid got me closer and closer to that photograph. I had a record of my previous mistakes and could leave them behind immediately."

Brian Bucharest

"I never realized what a fantastic tool it (Polaroid) can be for teaching visual perception until I used it at a Zone VI Workshop. No waiting for developing and printing, the picture is ready in one minute for a critique by the instructor or for a group discussion. This is just great for the student. He gets instant feedback. No chance to forget why he took the picture and also more important is seeing in the print what he thought he saw in the viewfinder. I believe that I have learned much from the experience and hope it will be used more in workshops."

George Dawson

Last Spring, Susie, Bern's 24-year old daughter, asked me to teach her to photograph. I said I would but only if she would do exactly as I told her. She agreed, so I sent her off to buy a \$30 Polaroid camera and lots of film. The camera has adjustments only for subject distance and "lighter" and "darker." I gave her a tripod and told her to start photographing what she wanted to photograph. She could use no more than twelve exposures a day and no less than four hours making them. We reviewed the pictures every day and often I sent her back to the same subject where, with the print in hand, she would try it again. The directions I would give her might be to improve the background, the camera position, the subject distance or, by choosing a different hour, the light

direction or contrast, etc. In one week she knew more about significantly presenting a subject than many photographers learn in many years. It figures, with all of these advantages:

1. Simple equipment. No light meter, no range finder, no F stops, no shutter speeds. Nothing to occupy the photographer's attention except the subject.

2. Instant feedback. The on-the-spot visual illustration of the similarities and differences between a three dimensional thing perceived by eye and the same thing isolated within the print borders and rendered in two dimensional black and white. Immediate adjustments can be made and a second picture - lighter, darker, closer, further, better composed, or from a stronger position - a better picture can be made.

Contrast that experience with the way most people "learn" to photograph. They seem always to start with a 35mm camera which is the most difficult camera to use even for an expert. It is the most difficult to compose with because of the inadequate viewfinder that never shows clearly what is happening in the corners and at the edges, because of the terribly distracting vibrating (or split image) focusing thing smack in the middle of the format. If you don't think that "feature" guarantees compositional suicide, examine a 35mm contact sheet of portrait heads. You will see that every head is placed too low in the frame, requiring amputation of the top 25% of a negative which, even at full frame, is miniscule. The focusing spot forces the "subject" into the poorest compositional position. The shutter speed numbers and the wiggling meter needle certainly do not help when you are trying to compose a picture. The coup de grace, however, to the beginning photographer's visual aspirations is, in my opinion, the usual lack of a tripod. To expect a beginner to (1) position a camera precisely and (2) hold it still while he (3) carefully compose (4) focuses, and (5) exposes, is more, as the contact sheets show, than can be realistically hoped for. As Emerson wrote, "Things are in the saddle and ride mankind."

Adding to these self-inflicted field problems of the beginner are the nagging doubts concerning the technical aspects which for all photographers at first (and for some, forever) seem insoluble. Which film, what speed, which developer, what paper, which enlarger?

None of the above distractions existed for Susie. She only had to learn to see photographically. Did she learn the

best way? Almost. Better still, I think, would have been a view camera and tripod with a 4x5 Polaroid back. Better because the easiest (best) way to visualize an image is on a large ground glass. A 4x5 ground glass is bigger than a whole 35mm camera and you can see the edges and corners clearly. A view camera is better because you see the image upside down. To a lot of people who have not experienced that way of viewing, it seems an insurmountable obstacle but, after a day or two, viewing right side up seems impossible! Did you know that Cartier-Bresson has a prism on his 35mm camera that inverts the image? Painters habitually invert their canvasses to check the compositional balance without the distraction of subject matter. The 4x5 with tripod is best because you focus on the ground glass (not through a peep-hole) and can easily see what's in and what's out of focus as you stop down. This equipment is, as Dorothea Lange said, "A machine flexible for its purpose." You can manage the image through camera controls - rising front, back tilt, etc. - where a hand camera limits the photographer through its lack of flexibility. And finally, when the beginning photographer is ready to use negative material, he is comfortable with the equipment.

If you feel that you have reached a plateau in your work, why not consider a few month's refresher using only Polaroid? Don't be surprised if a whole new dimension enters your work and, if you use "Type 52" 4x5 material, you can achieve print quality that rivals anything that can be made on conventional materials.

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It seems to me that what is of the greatest difficulty for the teacher to convey and of the greatest importance for the student to learn is the fact that what a photographer faces are conditions, not theory. For example, there have been a half-dozen magazine articles regarding the theoretical effect or lack of effect on films from the security X-rays that they are subjected to before almost all flights. Everyone has a theory; why doesn't anyone know? Determined to find out, I put all my film in lead foil bags - except one roll - before a recent trip to Europe. When I got home I developed that roll with the others and checked the base density against the base density of the lead-protected film. The protected rolls showed a normal .08 base density but the unprotected film showed a base density of 1.4. X-rays fog unprotected film. That's not a theory; it's a condition. Lead foil bags are a must for airline travel. They hold 20 rolls of 120 or 35mm film or one 100-sheet box of 4x5, and cost

\$5.50 per bag. (Available from Zone VI)

We try to teach students how to find out what they have to know. We try to teach them that before the problem can be solved it must be defined. What steps can be taken? Why ask: "Is f/5.6 sharper than f/16?" Find out by making two prints. Compare. Is my reflex camera focusing where it says it is? Are the "acceptable" depth of field markings on my camera really acceptable? What is the best aperture for my enlarging lens? How critical is a one stop error in exposure? Etc, etc, etc. We try to teach a professional approach which is total result orientation. It is learned best through comparison and controlled error. Experience really teaches. After learning to approach problems in that way, students stop repeating the same technical, visual, and esthetic errors. We try to change their angle of attack from endless theory concerning what could, would, or should happen, to what does happen. Conditions, not theory. We try to give our students the tools and the confidence to solve any problems that bother them.

The staff is getting very skilled at re-training time wasters. Some students arrive eager to tell us about nifty new procedures that they have read about or invented and, because they are different from my methods, they'd like to know why I don't use them when theoretically they seem superior. We ask them why they don't simply follow one tested, proven procedure and stick with it. When we do a good job with a student, they usually understand, at the end of the ten days, that they have been hiding behind tests and exercises to avoid the more difficult problem of going out and making pictures. I find myself saying almost daily throughout the workshops, "What works, works. Just do it." We ask students to find out what works and then don't waste time bothering about why or how. The object of photography is photographs -- not chemistry, or technical theory, or engineering, or camera collecting. We get on with it.

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Unlike previous working trips to Easter Island and Iceland, my latest trip combined a vacation with some work. I arrived in London on the 9th of September and flew to Inverness, Scotland. An old friend who lives in London had chartered a sailing boat and we travelled East to West, and back, on the Caledonian Canal. I have done a lot of crewing aboard ocean yachts and feel right at home on a boat.

The canal includes a series of Lochs (lakes) across the north of Scotland. Loch Ness, Loch Oich, Loch Lochy are con-

nected by canals with locks that raise and lower the boats. The system connects the North Sea with the Atlantic.

We had a fine time going west to Fort William and then back to Inverness in a week's time. The Scottish Highlands are very green and lush - why not? It rains practically non-stop. The people are friendly, the brogue is charming, and the countryside is quite lovely.

Then south to London. I'm no city man, but London is special. There is lots of space, beautiful old buildings, and the feel of tradition is everywhere. I saw all the touristy things, from the Tower of London to Madame Tussaud's waxworks, but the high point of my visit was a meeting with a long time hero of mine, the great short story writer, Raoult Dahl. Have you read "Kiss, Kiss" or "Someone Like You?" If not, you're lucky because you have them to look forward to.

Raoult is marvelous; knows something about everything including a lot more about photography than a lot of photographers. I confess, however, to becoming more than a little distracted by his enchanting wife, the actress Patricia Neal. What a wonderful lady; you would be delighted to see the display of campy objects surrounding her "Oscar" (won for best actress in the film "Hud"). I cranked up my nerve and asked her if I could photograph her the next day. She graciously accepted and together we produced a portrait that is quite exceptional. (Strand said, "If you want to make great portraits, photograph great faces.")

Then on to Rome on a 747 jet full of Japanese. I felt like I was caught in a scene from a Fellini movie. In Rome, I rented a sporty red Alfa Romeo and headed south to Pompeii.

Pompeii is vast. It is a full sized city that was built about a hundred years B. C. and has been buried repeatedly by volcanic ash from eruptions of Mt. Vesuvius. Even off season there were a lot of tourists. There are also a lot of people trying to sell you something, from a parking space to a sliver of the original cross. I tried to focus out the circus atmosphere but it wasn't easy. I couldn't get the feel, the rhythm of the place at all. Perhaps the trouble is that it is so rebuilt that you can't tell where the original parts were; perhaps it is the hucksterish atmosphere. I'd like to photograph it seriously but to do that would require everybody out, two or three weeks to

wander about to get a handle on it, lots of reading of its history, etc., and a week to photograph it. It took a full month on little Easter Island and two one month trips to Iceland to get a feeling for those places. You can't just walk up to a place like Pompeii and start photographing seriously, so I made a dozen slides with the Leica and drove on south to Paestum.

Paestum is a Greek ruin located about mid-shin on the boot of Italy. It contains buildings with the tallest standing columns in Italy. There are three Temple-like structures, each of which look something like the Acropolis. They are in perfect condition, roof excepted. I meandered about all day with the Leica and made about 15 exposures. By that time I thought I had something working, some feeling for the place, so I went back over everything, made notes and set up little markers for seven camera positions. It wasn't easy to work out the positions because the place is so exciting that there is the danger of making obvious pictures and getting postcards. I tried to keep a "warm heart and a cool head." Then I went to fetch the view camera and...horrors! "You need a permit for a tripod." Where does one get a permit? "Salerno (a hundred miles away)." Perhaps a nice big bottle of Vino? "Well, all right, but just one picture." I snuck two but the guard hovered over me muttering and watching for his boss. I had no appetite for a 200 mile round trip to get a tripod permit, so let it go at that.

There was an American film crew working at Paestum and I recognized the sound man. He was from Westchester and we'd worked together on some IBM films. This crew was doing a commercial for American Express. They had enough trucks and gear and people to do "Gone With The Wind," but all they had to do was photograph a lady in front of one of the structures saying, "I was saved in Ancient Greece" (robbed of her money, then "saved" by American Express). I mentioned to my friend that this was Italy and asked him about the reference to Greece. He told me that since these were Greek ruins, no one would believe that it was filmed in Italy. Catch 22.

I wasn't comfortable in Italy. Not being able to speak the language made me feel uneasy. But visually, Italy is exciting and the annoyances pale when you see a town like Portofino across the shimmering bay. It looked like a handful of jewels scattered along a hill under the blazing sun. I had trouble believing the meter's advice - 1/125 at 22/32, but I did what it said, then did what I thought - 1/60 at 22. 1/60

was right and the print should win the brilliant prize for 1978. I made the print small, only 5x7, to make it more like jewelry. My SEI meter is dying, I fear.

I put the car on a ferry and crossed the Straits of Messina to Sicily and went on to Palermo. When I checked in at the hotel I was advised that Alitalia, the only line that flies out of Sicily, was going on strike in two days and I might be stuck there for a long time. I was getting tired of the difficult driving, harassment about tripods, parking, the language barrier, and reminders that my camera equipment would probably be stolen so I revised my plans and flew to Shannon, Ireland.

What a difference. The people were cordial and the countryside exquisite. I drove from Shannon north to Galway and on to Donegal. I stuck pretty close to the coast. The second day I spotted a strange looking rock formation about 150 yards from the road. I walked over to a most exquisite sculptural form. It was a "Portal Dolmen" I found out later.

Dolmen means "table" in Gaelic and this looked like a giant table. It is actually a Megalithic (stone age) tomb, built about 2,000 B. C. It consisted of two huge flagstones set on edge and topped with a great flat capstone. The whole thing was about ten feet long, four feet wide and six feet high. I've never seen anything more exciting. The capstone touched the supports at only three points and from a certain position I was able to make a picture in which the capstone appears to float. As I opened the shutter it started to rain through the sun. The light was rich, clouds were all in the right places, and at that moment the disappointing trip to Italy was forgotten.

I decided to go Dolmen hunting. They are magic things and although I didn't resist other good photographic opportunities that presented themselves, I spent a lot of time visiting libraries and tourist offices and talking to farmers. I found three more tombs, one of which was impossible to photograph well - bad background, electric wires, no good camera position, etc., etc., you know. The second one was pretty good although I had to sacrifice the camera position I really wanted in order to avoid what would have looked like an aircraft hangar in the background. But the last one was superb. Not only was it as beautiful a form as the first, but it was surrounded by a ring of about 20 huge stones. After about an hour of just enjoying it, I got the camera. No camera position

problems, no foreground problems, and a beautiful stormy light make for a very exciting photograph.

The equipment I took on my trip consisted of a Leica M-2 with a 35mm lens for color slides and a Zone VI 4x5 Field Camera for serious work. I took a 120 roll film back for the field camera because this was a pleasure trip and I didn't want to carry 30 holders and load film in bathrooms this time.

For lenses, I took a 90mm Super Angulon, which is a trifle wide for the 2-1/4 x 2-3/4 negative, and a 121 Super Angulon, which is a trifle long for the 2-1/4 film. (With 4x5 film, the 90 would be very wide; the 121 would be slightly wide.) I took one of our new lightweight tripods and everything worked out well. I think the above is an ideal lightweight traveling kit.

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Some questions have accumulated concerning computation of bellows extension factors. Books and articles have been written about it, Kodak makes a calibrated slide rule dial thing to help with the math, etc. I just do this: First, I convert the focal length of the lens (assume an 8" lens) to the same number f/stops (f/8). The progression in inches of extension is the same as the progression in f stops! For example, if I extend the 8" lens to 11" (f/11), I must increase exposure one stop because f/11 is one stop less than f/8. An 8" lens (f/8) extended to 16" (f/16) requires an increase of two stops (f/16 is two stops less than f/8). Simple. If the lens isn't exactly 8" etc., choose the nearest f stop. For a 10" lens use f/11; that's close enough. To recap, if you have an 8" lens, open one stop if you extend it to 11", two stops if you extend to 16".

Use short lenses for close-ups. A 5" lens only requires a 10" bellows extension (and two more stops of exposure) to give you a same-size image on the negative, but an 8" lens requires 16" of bellows extension for the same size image. Same-size images always require 2 stops of extra exposure. If a same-size image is needed and you have only an 8" lens and a 12" bellows, extend the lens to 12" and then enlarge the negative slightly. It's a good idea to keep a dressmaker's tape measure in your kit to measure the distance from the lensboard to the ground glass. That's the "bellows extension." If it doesn't come out exactly, interpolate. For example, an 8" (210mm) lens at 11" gets one stop additional exposure while at 10" it would require about 3/4 of a stop more exposure. I'm sure that's inexact. I'm also sure that it would give a perfectly good negative.

There are also a few questions about reciprocity effect that seem always to accompany bellows extension questions. That's natural because bellows extensions require longer exposures or larger f stops. Usually longer exposures are required because at close camera-to-subject distances the depth of field is paper thin. The lens must be stopped all the way down, therefore, and so to get sufficient exposure, you must expose longer. Exposures longer than one second are subject to the reciprocity effect so that a two second exposure would give less density than a one second exposure with the lens open one stop. As the exposures indicated by the meter grow longer, the multiple increases.

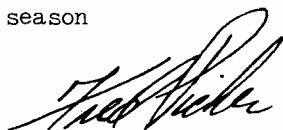
Recently, I made a photograph in the woods at dusk. It required considerable depth of field and the meter indicated that, at f/90, 32 seconds would be required. I made two exposures, one at 90 seconds and one at 200 seconds. The longer exposure was correct. (If you write these things down, you own the information forever.) I have a few other notes; eight seconds indicated requires sixteen seconds exposure.

Long exposures increase contrast because the high values break the film threshold the moment you open the shutter while the low values take a longer time to register. For a three minute exposure, values placed on Zone VIII would "expose" for three minutes while Zone I or II values might take a full minute to break the film threshold and so would only "expose" for two minutes. Usually this works in our favor because long exposures go with dim light and that usually means insufficient contrast. If such is not the case, additional film exposure and reduced film development is indicated.

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For over a year I've been trying to improve the standard print developers and fixers. The problems: dumping and poor separation of low values of developers, difficult washing, tough spotting, and paper curling from existing fixers and high price of both. More about our progress in the next Newsletter.

Best wishes for a happy Holiday season



ZONE VI Newsletter

NEWSLETTER #20

March 1979

"I was unprepared for the revelation of this kind of fine, original print. It must be seen to be believed. In that brilliant, pouring light, with no dulling, reflective glass to obscure them, those images shone with a mysterious inner light, arousing a sensuous response to their print quality alone: the blacks seemed rich as oil or deep as velvet, a thousand intermediate greys gleamed out - soft pewters, glinting silvers - and at the upper end of the scale were whipped cream, pearls and sunlight.

"I had never realized that this virtually infinite variety of intermediate shades between black and white constituted a unique phenomenon, not to be found in etching or lithography, nor in fact in any other medium in the entire history of art. It lies at the heart of black and white photography, this scale of greys which the skilled photographer -- never mind the appearance of the original subject -- can expand or contract like an accordion of unknown but variable length pretty much at will.

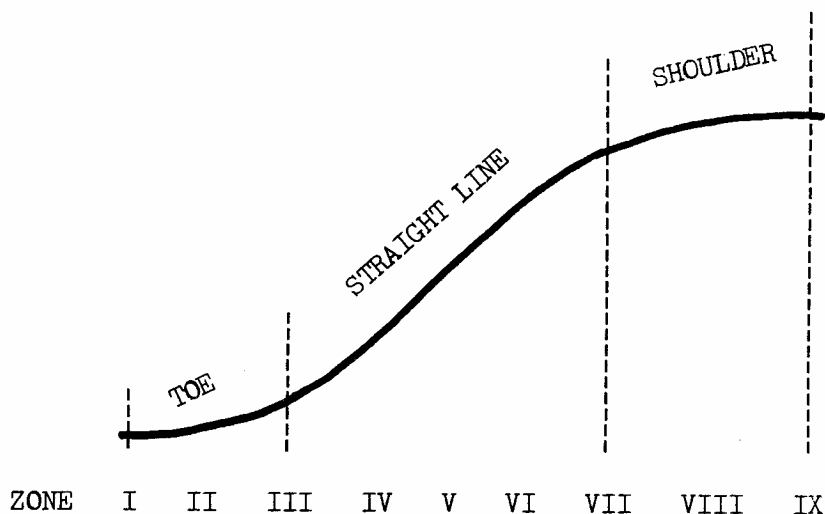
"The power and purity of those luminous prints, together with the shock of being there at all, combined to render me speechless before them. Long afterwards I learned that Edward found this silence most refreshing. So many of his visitors felt compelled to find something to say about each print. The more naive often exclaimed over the sharpness for which his prints were known, although actually that quality is easily achieved with normal equipment and a minimum of knowledge, while the manipulation of the tonal scale requires a complex technique backed up by considerable experience."

From Edward Weston, an article by Dody Thompson in "Malahat Review."

THE TONES OF A PRINT

In the "Zone VI Workshop" the culmination of testing for film speed and development time is the making of a series of "prints;" one representing every print value from Zone zero black to Zone IX white. A photographer who has actually made these prints -- not just thought about it or "visualized" them -- and studied the tones has learned that:

1. There is precious little excitement, beauty or separation between print values 0,1,2,3, and 4 compared to the big jumps between 5,6,7,8, and 9. That is in the nature of the materials and has nothing to do with your technique. The H and D curve, which graphically illustrates the effect of exposure and development on film, starts with a long low "toe" showing the relatively slight difference between negative densities from Zone I, II, and III exposures. Then the curve takes off upward into the "straight line" section at about Zone III $\frac{1}{2}$. The straight line section continues until the negative "shoulders" at about Zone VI $\frac{1}{2}$. The shoulder then tapers gently upward to Zone IX at which point increased negative exposure (in camera) will produce no increase in film density.



Sounds bad for the low values? Not really. In life, the "low values" -- dark colored, shaded or feebly lit areas -- do not appear well separated. Look into a dark corner of the room you are in and you'll see that there is no such thing as a contrasty shadow. The nature of the negative's low value characteristics and the nature of the dark shaded objects as they appear in life are pretty much in tune. Many prints, however, are lacking in even the modest low value separation of the negative. This "dumping" of the low values occurs from a combination of the basic muddiness of practically all of today's papers (a little silver might help) and the tendency of existing print developers.

2. Some tones are homely! As you go through the prints, and if you think about it, you could choose one or two you don't care for. At the other extreme, you'll have two or three beautiful tones. What do you do with this information? How do you (should you?) apply that knowledge when exposing your negative and making the print? A beautiful and expressive print, where all values are below Zone VI, is rare but I've seen many beautiful prints where 90% of the print is in exquisitely modulated tones of VII and VIII.

3. It might be all right (with careless disregard for the dangers of generalization) to draw an analogy with music and say that the lower values -- the string bass or full orchestra when employed as continuo -- forms the background or the springboard for the more glamorous virtuoso wind, brass, clavier, or stringed instrument. And, further, that the instrument, unaccompanied, can also perform wonderfully. So a snow scene that has the sweet, silken high tones of the solo violin (all values above VII) can be magnificent but a print where all the values are "continuo" -- dark gray -- is often homely and boring.

If you're still working with that set of prints, you'll become aware that you are often photographing your subjects in a way that would make a tonally exciting presentation difficult. I have a pair

of portraits that illustrate the point. One is of a man in a denim workshirt standing in front of weathered barnwood. The flesh tones are print value VI and that is the highest value in the print. The denim and barnwood are about IV so the effect is drab and the touches of black in cracks between the barnboards, eyes, folds in clothing, etc., don't add much brilliance. (Black is grossly overrated in the photographic literature. Any damn fool can print black; just leave the enlarger on and go to lunch. But it takes the rare and good printer to print the high values and make them sing.)

The other photograph is of a woman and she is also standing in front of barnwood. Her skirt, like the man's jacket, is denim. But her shirt is creamy white and the print is vibrant and exciting because the range of the print is extended all the way from touches of black to the high value "edge." There are print values of VIII and even touches of IX in the soft folds of the T-shirt material.

I messed up the picture of the man but at least I didn't make that same error again. I had done the man first, so when I decided to photograph the woman against the barnwood, I knew the tonal problem and asked her to wear white. The white shirt worked out well but subsequent experiments in the handling of that specific problem have shown that the white shirt which takes up about 25% of the picture area, was not necessary to achieve the tonal result. Even a tiny area of white, as small as a gleaming button, will serve as well. What is important is extending the range of tones, not the amount of space occupied by a single tone.

If you are thinking that the picture of the man might be made less drab by printing it on contrastier paper, here's what would happen: Since the highest value, which is the flesh tone, would have to be printed to the same print value VI -- you couldn't give him a pure white face -- the only change would be that print values III and IV would drop down to about II and III if you used a #3 paper or to I and

II if you used a #4 or #5 paper. The result would be drab, harsh, and unnatural instead of just drab. No, the problem was in the original seeing. I should have used a different background or asked him to change clothing or something. There is always something you can do.

Incidentally, the light was the same in both portraits; my favorite portrait light...open shade. That's solid shade, never that terrible tree dappled shade that produces results only a dermatologist could love. ('Open' refers to the quality of shadow that is open to the sky as opposed to shade created by a porch overhang or the like.)

It is interesting to print the portrait of the woman and I have done so as a demonstration at several workshops. Here's what happens. The first step, as always, is to make a test strip print. Since all the tones seem well balanced on the proper proof, we use the same paper, #2. Note: I've seen it recommended in photo literature and know that many people habitually use #3 grade as their standard paper. I believe that's an error and I think they do it mainly because of a problem they have created in the negative. Their negatives are probably so thin and weak that their prints would have a range of gray to weak gray on #2 instead of a range of dark gray to weak gray on #3. Another possibility is that these people are printing on "dead" paper. (Ilfobrom #2 has more strength than any Kodak #3. Try it. If your Ilfobrom #2 prints the same as Kodak #2, you've got bad Ilfobrom.) And, finally, there is much judgmental criticism coming from unqualified people regarding the quality that a good print should possess and do you know what that quality is? SNAP. That criteria of print quality has about as much validity or sensitivity as the judging of a piece of music solely on the basis of its volume. #3 is more "snappy" than #2 so they like it better.

Now, there's nothing wrong with #3 paper per se. Many good prints are made on #3 and it is almost as

good in quality as #2. The trouble is that a negative designed for a #3 paper has deficiencies; usually, underexposed low values. Underexposure can happen to anyone now and then but if you design your negative for #3 and you need more contrast you have to go to #4. Number 4 is of lesser quality and so extreme that it usually looks artificial. It is, at best, an emergency paper. It is best used for a print that was conceived consciously as a "departure from reality" or for printing an underexposed photojournalistic type negative in an attempt to wring out a trace of tone.

Back to the woman in the white shirt. The test strips run vertically from right to left; three seconds, six, nine, etc., one inch apart on a full sheet of 8x10 #2 paper.

Since my proper proof time is 15 seconds and the proof looks good and I'm using the same enlarger head height and lens opening, 15 seconds will be close. I'm printing, as always, for the high value and that's the white shirt in this instance. Naturally, my test strips also run down through the gray skirt and here's the important part that every good photographer/printer knows well but that technical "experts" seem blissfully unaware of; the test strips clearly demonstrate that although there is an enormous difference, tonally and emotionally, between the 12, 15, and 18 second exposures for the high value -- the white shirt -- there is no appreciable difference, tonally or emotionally, between the 12, 15, or 18 second exposures for the gray skirt! After I make another test strip of 13 and 14 seconds it is obvious that, though the gray skirt has a six second "latitude" for a 15 second exposure, the white shirt must be within one second of the ideal if an outstanding print is to be produced.

The message is clear. Don't worry about the middle values. They don't amount to much emotionally and will take care of themselves if the photo-

graph was originally well conceived. (Any damn fool can also print gray. Remember your first print? You get about the same gray whether you expose 12 or 18 seconds and either is acceptable. Try it.) The high values make the difference.

This seems to be my day for dangerous generalization but I'll hedge with the word "usually." Usually...if your proper proof shows a fully exposed, tonally balanced negative of proper contrast and you print it to get the high value right, the other values will fall pretty much into line. If the lowest values don't, change paper grades. Note: Prints appear to lose contrast as enlargement ratios increase so a negative that makes a good 8X10 print on #2 paper often needs a #3 for an 11X14. But if it's #3 for an 8X10, it's #4 for an 11X14...

Time out for a commercial message: None of the foregoing will have the slightest validity and, as a matter of fact you won't even know what I'm talking about, if you are printing with a condenser enlarger. The Callier effect is an effect, not a theory. It blocks the most emotionally important (and tonally beautiful) values in a print, those print values above VI. You get chalk instead of cream every single time.

The approach of "The Zone VI Workshop" sometimes has been criticized because it suggests that there is not more to negative making than fixing the low value densities by locating the personal ASA rating and fixing the high value densities by finding the development time that will print a Zone VIII exposure as a Zone VIII print value. The book, these critics say, ignores the middle values. Right. It does so because, as the foregoing describes, once you get the high and low values where they must be, the middle values will fall where they will. You can't change them appreciably and, if you're a photographer, you realize that if you could change them, you wouldn't. They're fine. What's the difference if your Zone V card doesn't match the Kodak 18% gray card? I don't know whether

mine does or not and I don't care. The reason you make the cards is to find out what the materials are doing, not what they should or could be doing. With the knowledge of what will actually happen, you place the values and they match the gray card that you made, not the one Kodak made nor a meaningless (and photographically unattainable and unacceptable) group of "densities" on a printer's step wedge. These step wedges represent reflection densities for ink printers. They are decidedly not print "Zones." The densities listed have nothing to do with transmission (negative) densities either. If you have one of those things, or a gray card, don't match prints to it, don't photograph it, don't think about it. Throw it away.

Recently someone sent me a photo magazine article which recommended the use of a Kodak gray card. The author showed in drawn illustrations (not photographs) that if you set up a white object, a gray object, and a black one and metered the gray, you would get a white, gray, and black photograph. Why didn't he do it? If he had done it, with a camera instead of a pen, he would have found that you get a gray, a lighter gray, and a darker gray. Try it...with a camera.

This photographing of tones of gray and relating them to zones is a common error and stems from a lack of knowledge of the fundamentals of the working of light sensitive materials. Film responds with increasing densities to increasing amounts of light. Film responds only to reflected light, not to the color of the object photographed. A good example of this is seen in "The Iceland Portfolio" photograph called "Bjarnanes." A dark brown door was photographed at the moment when the sun reflected off the door straight into the lens. Because the sun, door, and lens coincided at the "glare angle," the brown door achieves a print value VIII and touches of IX. There is a white painted cross in the same picture. Though it has a more reflective surface than the door, it was not at the same reflective angle to the

lens when the photograph was made and therefore appears only as print value VII. If the white cross had been shaded by the building, it would have fallen on Zone V. If the photograph had been made on a gray day, at a different moment, or from a different position, the door would have been a print value V and the white cross would be VIII. The above description should demonstrate the uselessness of incident light meters. Does this mean that an 18% gray card does or does not reflect 18%?

Sometimes it does, sometimes it doesn't... If you want to know every single time exactly how the values of a scene will appear in a print regardless of conditions, then (1) just get a good (linear) spot meter and meter the important reflectances along the lens axis, (2) place the values on the exposure scale as you want them to appear in the print, (3) set aperture and shutter speed in accordance and (4) take the picture. If you follow that exact sequence without deviation for every picture you ever make you will soon get very good at it, and very fast, and very consistent, and your exposures will become monotonously perfect...for the rest of your life. Or, you can try out next month's nifty new trick, etc., etc., which will take you right back to square one... again.

PRINT MANIPULATION

I am not against discreet dodging or burning to enhance or dramatize my original impression or conception but the negative must be pretty close to what you ultimately want if such manipulation is not to be obvious. It seems to me that if a negative needs more than about one-third of the total time of enlarging exposure in dodging or burning time for an area, the manipulation will often become apparent. Another photographic myth that has messed up lots of folks is the suggestion that "dodging the shadows and burning the highlights," is the only way to improve a print by manipulation. Wrong. I hope you have made that set of Zone prints (if you haven't, you're

free to tag along, but you really aren't learning much); if you have, you can see (that's the difference) that those print values I and II don't have much going for them. They are sort of an unconvincing tentative semi-black. No detailed features of the photograph should be that dark because if they are you can't see much in them. If you dodge them to "open up" the shadows, you get a featureless gray. Why not consider burning them down to a rich, beautiful black which is tonally superior and which will also strengthen their forms? Don't fight the negative. Take it where it wants to go. Same applies to the delicate high values. Why not take them higher? A bit of gentle dodging might carry a print value of VIII up to an exquisite VIII $\frac{1}{2}$ where it just tingles on the edge. The best dodger I know of for this really delicate work is a 1" oval of window screen on the end of a bicycle spoke.

Assume that everything you have read in photo literature and, of course, that would include the foregoing, is 180 degrees inaccurate and test it from the opposite side. You, like me, will soon realize that setting a word in type does not guarantee its accuracy and the experts who write and teach, but don't photograph, can teach you no more than they know. Whom can you trust? Trust Ansel; he isn't all that easy to understand and he makes you work for it but at least you know you are hearing it from someone who can do it. Ansel Adams, you will be happy to hear, has recently undergone surgery which was completely successful. I have just spoke to Alan Ross, Ansel's right hand man, and he assured me that Ansel is recovering beautifully. If you would like to drop him a line: Ansel Adams, Rt. 1, Box # 188, Carmel, CA 92923.

If you decide to go to a workshop, go to one where the principal teacher can perform the kind of photography you are interested in. If you are

interested in expressing yourself through multiple imagery, Jerry Uelsmann is, I think, the best. And he's a wonderful man with a great sense of humor. For photojournalism and editorial work, Charles Harbutt and Bruce Davidson are outstanding. For natural scene, landscape, architectural, portrait, etc., with emphasis on technical quality, go to the ones who can hang 'em on the wall; Ansel, Oliver Gagliani, Paul Caponigro.

As far as color is concerned, I don't know of a single good photographer who teaches color, though some can teach you some technique. I would recommend Marie Cosindas and Elliott Porter for color as they are the only ones I know of who can really do it, but they don't teach. There are specialty workshops, too. For platinum printing technique, George Tice can surely do it.

I can't find anyone to work on an idea I have and I don't know how to do it myself. What I'd like is a device to raise and lower the corner of a tray $3/4$ of an inch and do it 45 times a minute. I just tried that combination by hand and it sets up a nice wave pattern that is perfect to keep one or more prints moving about in the fixer tray. It would be a worthwhile aid to archival processing because most people just give prints in the fixer a couple of jiggles and let them lie there. Not so good, and the proper alternative, which is agitation for five minutes, is tedious. If you would like to work on it or know anyone who would, drop me a line.

To go with the agitator, how about a simple, quiet, five minute timer that you could activate as you put a print in the fixer and that would buzz, or ding-dong, at the end of five minutes to remind you to take it out? It should then re-set itself. It's as important to fix a print the proper amount of time as it is to agitate it. Too short a fixing time and the paper is not fixed

properly. Too long and you bleach the high values and make an archival wash impossible. To avoid dripping chemicals all over the timer, I'd like it to be activated by a big button that could be pushed by knee or elbow, or a footswitch.

The agitator would not be useful for the developer tray. Prints need vigorous agitation in the developer and those who merely tip the tray or jiggle the print with tongs are losing contrast and encouraging uneven areas in skies and other smooth areas. Use your hands to agitate constantly and flop the print from face down to face up and back at least every 15 seconds.

Our new chemicals are ready and we'll be sending out a new catalog soon. The most exciting is the print developer. Early in this Newsletter (and about ten Newsletters ago) I referred to the "dumping" of low values that occurs in many instances and is an aggravating problem. Dektol does that, though it treats the high values beautifully. The problem was to keep the high value richness and get at least as much crispness at the lower end as the negative can provide.

The whole experience was interesting. It pointed out most emphatically that "home brews" or adding a sprinkle of this or that to a proprietary product is no way to proceed. Those formulas are very delicately balanced. In the next Newsletter I'll cover the development of these products in more detail.

There will be a new book of my work coming out June 12 to coincide with a show opening at Prakapas Gallery in New York City. I'm keeping notes on the planning, design, and printing aspects and will try to walk you through the making of a photographic book.

With best wishes,



ZONE VI Newsletter

NEWSLETTER #21
June 1979

"The things that could be more and
are content to be less."

Ortega y Gasset

Though it is not yet generally available, I received a few sheets of Ilford's new Galerie paper to test. Mel Stone, the Ilford chief, told me that paper for general use is expected this month.

Except for those performed by Consumer's Union, I think product tests are generally useless. In other publications, hi-fi equipment, cars, cameras, etc. are always tested against nothing and never against each other. When the product is made by a company that spends big advertising money with the tester, some conflict of interest may be suspected. In any event, it's like a one horse race. No products fail and all are ultimately pronounced winners. All we poor readers want to know is how "A" compares with "B". They never tell us that.

I decided, therefore, that any test that failed to compare Galerie with the best paper currently available would be meaningless. The best paper currently available is good Ilfobrom. (There's a lot of bad Ilfobrom). If Galerie should show superiority over Ilfobrom, I would compare it next with something even better (though unavailable), Varigam. This would be just to see how good it really was, compared with a known quantity. Then, (heady thought) assuming it could stand up against Varigam, I would check it against Ilfomar (also unavailable). I could not imagine it would be better than Ilfomar. Different maybe, useful maybe, but not better.

I don't test papers with densistrips and reflection densitometers because the information they supply is not at all what I want to know. A reflection densitometer will give you its opinion as to which paper is whiter and which can get blacker, but if you can't see that, what difference would it make? Counting densistrips will tell you which paper has more or less contrast, but if you can't see that, what difference would it make? And who cares how much contrast a paper has -- whether a #3 of one manufacturer matches a #2 of another? What you care about, if you're a photographer, is only whether a paper can make expressive and beautiful prints. To see how well they make prints, you make prints. You don't draw curves or play with machines. (Imagine Atget or Strand or Lange with a densitometer.)

Here's how I tested. I chose an excellent full scale 8x10 negative to contact print. To choose a poorly made negative for testing paper can be a good idea only if you intend to produce identical poorly made negatives. The inferior aspect of the negative -- too weak, too contrasty, too dense, etc. -- is likely to dovetail with a similar but opposite inadequacy of the paper to provide a superficially improved and, therefore, misleading result. The same sort of misleading coincidence can occur when printing a weak underexposed, underdeveloped negative with a condenser enlarger. Since you can't do anything to hurt a negative like that, the false values imposed through the Callier effect might appear to help it while a cold light head would print it exactly as bad as it is. In either event, you get a poor print. Similarly, to compare papers by comparing prints made from an inferior negative to see which print is least inferior strikes me as useless as testing a paper against nothing more substantial than your opinion or your memory.

The reason for contact printing rather than enlarging was to eliminate a possible sharpness variable caused by a negative sagging slightly out of focus in the negative carrier or the enlarger moving during exposure. Contact prints are immune to those problems and, although you might not think so, a slight change in sharpness between two prints could change the apparent qualities of the papers if they were similar in other respects. Why take a chance?

I made test strips on Ilfobrom #2 and Galerie #2 and developed the prints together for two minutes in Dektol diluted 1-2. The reason I used Dektol instead of Zone VI developer was that I thought it logical to test them with the industry's standard. The exposures that perfectly matched the high values seemed to be 16 seconds on Ilfobrom and 12 seconds on Galerie. I then made straight prints at those exposures and developed them together. These are the unedited notes I made in the darkroom:

"(Expletive deleted), Galerie is weak as a cat, not as rich as Ilfobrom, no atmosphere, no presence, no space, about a $\frac{1}{2}$ grade less contrast than Ilfobrom. (You don't need densistrips or a reflection densitometer to determine relative contrast. If you just match the high values, as I did, the contrastier paper will have darker low values. It's that simple.) Color is weak, watery blue-green. Could probably be toned OK but why bother? A gutless wonder, veiled and muddy on the bottom, chalky and flat on top."

I decided to try the #3 Galerie against the #2 Ilfobrom. I assumed that the contrast would be somewhat similar since the #2 Galerie was soft. Nineteen seconds on the #3 Galerie matched the high values with those of the #2 Ilfobrom. All grades of Galerie (and Ilfobrom) are supposed to be the same speed so that you can just change paper grades and print away at the same exposure. But the #2 Galerie print was made at 12 seconds while 19 seconds were needed for the #3. The "speeds" of #2 and #3 may or may not match in the middle grays but, even if they do, that's wrong; speed should be measured at the threshold of any light sensitive material and the threshold for paper is the high values (low values for film which is why we test for film speed at Zone I). But matching speeds is not what we are looking for; a beautiful paper is.

I made a 19 second straight print on #3 Galerie:

"(Expletive deleted - same unimaginative one)
#3 Galerie is about as brutal as #4 Brovira.

And the #2 was like a #1½ Kodak something. Dumps everything into black at about print value III. High values from V up are a decent match to #2 Ilfobrom. It's veiled; looks like vaseline on it. Will try it against a #3 Ilfobrom as a check on contrast. Eighteen sec. Ilfobrom matches 19 sec. Galerie high values. Suspicion confirmed; though Galerie #2 has less contrast than Ilfobrom #2, Gal 3 has more contrast than Brom 3. A whole grade at least. All #4's are lousy and this 3 is at least a 4, (and neither as good as Ilfobrom). Not much of an assortment; a 1½ and a 4, neither as good as Ilfobrom, with nothing in the middle. Maybe the #1 is useable. Brom 1 with 9 sec. exposure matches Gal 1 with 8 sec. Made print. Yuk. (That's not an expletive.) Foggy looking and weak like a #2 Galerie, but worse. No match for Brom 1."

The last thing I'd want to do is discourage the production of any new high quality paper so I immediately called Mel Stone and asked him if this was the real stuff or a test run, or what. He told me that the real stuff hasn't been produced yet. "If that's so, how come you're sure it's so great?" I asked. He said that they already had orders for it. Oh...

I have other questions. If they wanted to produce great paper, why did they discontinue Ilfomar? Didn't they know how good it was? Ilfomar has black that you can reach into up to your elbows and do you know what makes black black? Silver. At \$20.00 per box more than Ilfobrom, which Galerie will be, I think they could have sprinkled in a little more silver.

When the production stuff comes out I'll buy a few boxes in a store and re-test it, and hope, but I'm not optimistic. What I find most disturbing is that if this paper fails in the market place, and it surely will if what I tested is what we get, then Kodak will conclude that there is no demand for a high quality expensive fibre base paper and they'll keep grinding out plastic. I am convinced there is a demand but manufacturers can't just say a paper is high quality;

they have to put quality in the box.

What to do? A year ago I wrote in a Newsletter (when Ilfobrom cost \$28.00 a box of 100 sheets, 8x10) that it would never be cheaper, better, or more available. Ilfobrom is now \$38.00 a box. It will never be cheaper, better, or more available.

*

The smartest procedure I've heard of for checking the efficiency of a printwasher was used by Ansel's assistant, Alan Ross. He writes:

"In the one main test I made of it, I placed four unexposed 16/20 sheets of paper which had been processed, toned, etc. along with other prints into edge, middle, and in-between slots in the washer after the usual HCA and pre-wash rinse. After about 80 minutes in about 58 degree water at a flow rate of about 1 gpm the four test prints showed zero stain with HT2.

"We are impressed with the washer, and I am sure that we will be informally singing its praise through friends and workshops."

After testing this washer as described, Ansel bestowed a final endorsement by buying two more. In a recent letter he stated, "We have received your washers and they perform BEAUTIFULLY."

Once in a while we get a letter asking if our washer can wash RC paper. I've never printed on it so I wouldn't know. Since RC is plastic, I should think you could just wipe it off with a wet rag. No matter how you wash it, it will self-destruct in a short time which is all right because anyone with the sensitivity required to make a decent photograph would never print on RC anyway. Those who buy it are ruining things for the rest of us. Their purchases encourage the manufacturers in their headlong pursuit of mediocrity (and profit) to continue to sell it and as sales of it go up, other papers are first reduced in quality and ultimately eliminated.

Now, if people would stop buying RC paper and junk food and snowmobiles and rock records and trail bikes and dune buggies and orlon clothes and micro-wave ovens and ticky tacky houses, we soon wouldn't have any. Sounds good to me.

*

In the last Newsletter a forthcoming book was mentioned. The book, called Fred Picker, is a monograph containing 80 photographs made between 1972 and 1979. It will serve initially as a catalog for an exhibition to be held at Prakapas Gallery, 19 East 71 Street, NYC, between June 12 and July 14. If you are in the area, please stop in.

Making a photographic book has something in common with archival processing; the greatest difficulty in either case is making photographs that are worthy of it. The rest is easy except that in the case of a book you need one other thing. You need a publisher who agrees with you. Many writers and photographers regard their publishers as having the sensitivity of a slum landlord and the financial morality of a Mafia loan shark. Not me. Anyone with the good taste to appreciate my work and the courage to back his conviction with about \$30,000.00, without knowing for sure whether a book will sell, deserves a certain amount of credit.

After you have the prints and the publisher, there are two other necessary ingredients if your book is to be worthwhile. You need a good designer and a good printer. How much control you will have in choosing them is a result of negotiation with the publisher, unless the publisher is "Vanity Press" (you). My publisher allowed me to pick both designer and printer and I chose both by the quality of their past accomplishments.

There are several printers in this part of the country with outstanding reputations but the work they have done on photographs that are similar to mine was not to my liking. There are two printers of photographs whose expertise and dedication to excellence puts their work, I think, far above the rest. They are Meriden Gravure Co. in Connecticut and Thomas Todd Co. in Boston. Meriden printed my Iceland Portfolio and recently com-

pleted a book considered by many, myself included, to be among the most beautiful photographic books ever made. It is called Georgia O'Keefe, a Portrait, by Alfred Stieglitz. Whatever I would have to do without to own that book, I would do without.

Thomas Todd does work of the same caliber. They recently completed the marvelous Disfarmer book and the superb new Walker Evans book and are at work on a 300-page retrospective of the work of Cartier-Bresson. When I visited the press they were printing the jacket of Ansel's new Singular Images. The West Coast printer who will print the rest of that book will have to sweat to keep up the standards set by the jacket. I spoke to Ansel and he agreed. Time schedule, size of run, and other non-aesthetic considerations indicated Thomas Todd as the final choice.

I chose Lance Hidy of Lancaster, New Hampshire, to design the book. He designs photographic books exclusively and his designs are to my taste. They are clean, elegant, and understated and, because he loves photographs, he subordinates any art directorish tendencies he may have to the photographs. He is easy to work with, tells you the truth as he sees it ("Have you considered leaving that one out?"), loves type, and loves books. He is currently designing Ansel's new Yosemite and the Range of Light. Ansel thinks so highly of him that he allowed him to pick and sequence the photographs, subject to a final OK. So did I. Photographers are not always the best judges of their own work and I think it's a good plan to pick someone you trust and then get out of the way. In having editors like Lil and Lance, I was more fortunate than most.

Lil chose 95 pictures from proofs which were to be reduced to 70 after final editing. We finally ended up with 80 by printing pictures on both left and right pages in ten more instances than was originally planned. After the 80 were agreed upon, I reprinted those made from 4x5 negatives to "same size" as they would appear in the book. The prints from 8x10 negatives had to be reduced by the printer as I had no way to print them smaller. No harm done. It is not a good idea, though, to give a printer a smaller print and ask him to make

it larger. It is also a poor idea to give the printer an 11x14 from a small negative and ask him to reduce it to a 5x7. The quality that is lost on the way up in the darkroom is not regained on the way down in the copy camera.

There is just no such thing as prints "good enough for repro." Garbage in, garbage out. There is still another intangible, but very important, factor involved. If you supply prints of excellent quality, uniform in size, in separate clean envelopes, with neatly typed captions and precise and consistent crop markings, you set up a standard of precision and excellence that has a profound affect on everyone involved with the job. I was determined that my presentation to the printer would be the best he ever got. He said it was. More important, the people on the job respond in a concrete way. They are creative people and if you give them a bunch of good enough stuff they'll give you a good enough job. If you don't care, why should they? It's not unlike someone handing you the traditional 11x14 Polycontrast box jammed with wrinkled gray prints. He'd like you to give them serious consideration. Since he didn't, why should you?

Sizing and positioning prints was no problem. We decided to have all prints measure 6-7/8" in the long dimension. This leaves plenty of white space as the book is 8½" wide by 10½" tall. It seemed to us that in a book where the largest print would be 6-7/8" long, it would be rather precious (and distracting) to size some 5-1/4" or 4" etc. My friend Simon Watts calls that sort of thing "The monotony of faint variation."

I made three sets of prints. The pilot prints were saved and used as work prints to make photostats to book size for layout and sequence and construction of the "dummy." After the stats were made, the pilot prints were destroyed. A set of finished prints was spotted carefully, crop marks and captions added, paginated, and packed in individual envelopes. That was the printer's set. The last set was filed away.

After the stats were made, we laid them all out on the floor. There are lots of ways to arrange a book: by place (all the pictures of Ireland together);

by subject matter (all portraits together); chronologically (the sequence usually employed for retrospective books); or according to design. In that case, those pictures that contain similarities of shape, mood, or emotional direction complement each other without concern for subject matter or location. There are no rules and we sort of felt our way while trying to avoid the temptation of the obvious. A good book design flows but should also contain surprises. Strand had a succinct way of saying it, "Don't be boring."

We edited ruthlessly. If in doubt, we left it out. A weak picture reduces every other one to its own level. I've never seen a slide presentation that could not have been vastly improved by being reduced to 25% or less of its bulk, have you?

After the selection and sequence are decided, the designer trims the stats to exact cropping and pastes them into book form in sequence and position. This is a dummy of the entire book and the pages are all there and all accounted for from the front matter starting with the half title page to the final illustration. I find it helpful to live with the dummy for a few days to see how it holds up. There are always several improvements that the author can suggest. These, in my experience, are rudely dealt with by advisors, employees, former friends, etc.

Next, Lance decided on the type face to be used. He chose Helvetica thin with letter (open) spacing for all large type and normal spacing for the introduction, copyright stuff, etc. It's a clean, quiet type that doesn't attract undue attention to itself. It takes a confident designer to avoid the excitement of going arty with three type faces in six sizes and assorted spacings. Photographers who specify their own type invariably choose a face that would be perfect for the lettering on the side of the Red Baron's plane.

The copy is sent to the typesetter. What typesetters often receive is an assortment of erasures, misspellings, and vague marginal notes. What they return is the same sort of mess. The job flow stops, everything must be rescheduled, everyone gets upset,

the book begins to deteriorate, and the author gets the bill for correcting type errors that are his fault. We were careful to send flawless typed copy with precise directions specifying the type face, letter spacing, and size.

While the type was being set, the halftones were being shot. "Halftone - a photoengraving made from an image photographed through a screen having a lattice of horizontal and vertical lines and then etched so that the details of the image are reproduced in dots." Webster. There are grey screens, magenta screens, and screens with square dots, elliptical dots, and with fineness from a newspaper screen with under 100 lines to a maximum of 300 lines per inch. Todd uses a 300 line elliptical dot screen. The experts disagree about everything but spend more time arguing about screens. What do they know? You look at something like the Disfarmer book and you say give me that and who cares if they shot it through a screen door?

Fine reproduction of photographs requires double printing. There are two main methods with dozens of refinements and each press has its own ideas. The main methods are double-dot, where both plates are made from one negative, and duotone, where two different negatives are made. One negative is designed for the high values and the other for the low. By adjusting the main and the "bump" exposure, which is a short secondary exposure with the screen removed, and adjusting the development time, the character of the halftone can be manipulated. People who can do it well are rare. A top press insists on shooting an assortment of halftones and running a sheet on the press before shooting the rest. Press proofs are expensive, as is everything in a quality job, but it is an important opportunity for the photographer to check on the kind of job it will be and suggest adjustments if they are indicated. A good press knows what a good photographer knows; you can't tell anything about the character of an image by looking at a negative.

One negative, the black printer, is then shot for the type. All negatives then go to the stripper. He - she in this case - is important too. She lines up and masks all the negatives and strips them on to flats.

The flats are contact printed on light sensitive metal forms which, when developed, provide an etched image.

The ink color is very important to the character of the images. It's hard to repress your creative instincts but I've seen some disastrous custom blends so I chose two beautiful proven formulas that Todd had used. My book had been arranged with subject matter that would respond well to a warmer tone in the first two signatures. Those sixteen pages were printed with the formula Todd used for the Disfarmer book. The next twelve signatures were printed in a cooler ink used for a book called To the Manor Born. Both books had been printed on Warren's Lustro Offset Enamel, the same sheet that we were using, so we knew exactly what to expect.

The first two forms go on the press. As they turn, they pick up ink and transfer it to the "blanket" in the dot pattern. The first form is primarily concerned with the low values and prints a neutral black. The second form prints the higher values with the ink that determines the image color. There is a lot of overlap of dot on top of dot and the dots must be in perfect register so that the job doesn't look like ~~this~~. The blanket, not the form, puts the ink on the paper. The pressman conducts the whole thing like a symphony. The few good ones are treated, and paid, like a star quarterback.

Bobby, a good one, pulls about every hundredth sheet and checks it against an OK'd master for tone and contrast. He also inspects for specks from dust on the roller, etc. It took about ten days to print the fourteen sheets front and back. The run was 10,000 books. When the printing was over, the sheets were delivered to the New Hampshire Bindery to be folded, collated, glued, sewn, covered, stamped, and end-papered. When the jackets were put on, it was finally a book. That was very exciting.

Lil, Bern, and I agreed that we would like to have Newsletter subscribers get their copies at a special discount. Though the price of the book is \$20.00, if you will send \$15.00 before July 1st, we will be happy to forward a signed copy.

Ansel received so many messages of good will from Newsletter subscribers that he asked us to say:

"I have received over a thousand cards and messages relating to my recent heart operation and I am in a quandary on how to respond to them. I extend my appreciation to all and feel it a definite obligation to live to 100. Words of cheer hasten recovery and all those I received certainly helped."

*

The workshops are filled but if you would like to come, call Lil at (802) 365-4200 to see if there are last minute cancellations.

*

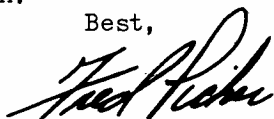
Galerie Post Script: In spite of my minimal respect for the more scientific methods of investigating the properties of photographic materials, I was mildly curious to learn, if possible, just why this paper is so much more suited to the wrapping of fish than the making of prints. The perfect opportunity presented itself with the arrival of my friend, Fred Barstow.

We printed his calibrated wedge on #2 Galerie, Ilfobrom, Ilfomar, and a paper from a small French company. Three papers showed the characteristic gradually darkening tones corresponding to the various densities of the wedge but the Galerie showed no significant change of gradation until the fourth wedge, at which point it took an abrupt dive from very pale gray to about print value V.

They got the curve upside down! What pitifully small contrast the stuff has overall is jammed up at the top (high values). Where you want smoothness, you get chalk. Where you want crispness, you get mush.

Fred just called from his shop. He completed curves from reflection densitometer readings and says that the Galerie paper curve is S-shaped! It has no straight line at all. That makes it as poor sensitometrically as it is aesthetically. Fred Barstow's title is Director of Black and White Development; his "shop" is the Polaroid Corporation.

Best,



ZONE VI Newsletter

NEWSLETTER #22
September 1979

"I learned from my own pictures,
one by one, and had to: for I
think we are the breakers of our
own hearts."

One Time, One Place, Eudora Welty

Thank you, thank you. Your response to the announcement of my new book was heartwarming. Nearly 50% of Newsletter subscribers ordered a copy and your subsequent letters regarding the book and the photographs were wonderful to receive. I haven't answered them all yet but I will. The sales of the book were a surprise to everyone and we will be going back on press shortly for a second edition. Thank you again.

The workshops went well and, as always, we learned a little something. Most folks express the desire to learn to print as a primary reason for their attendance. If they feel that poor prints are what separate good photographs from poor photographs, they are wrong. A terrific Cartier-Bresson photograph is more exciting in a newspaper reproduction than an exquisitely printed, gold-toned contact print made by any photographer who is overly concerned with technique. The latter may think that nifty prints will make up for a paucity of emotional content but they never do.

We try to get them past the technical things quickly so they can get on with the real problem and

the last part of this Newsletter attempts to address that. The first part is concerned with a quick and efficient method of getting the technical aspects of negative making behind you.

My greatest technical problem when I began photographing was making a good printable negative. I read everything I could about negative making but most photo writing was (and still is) a repetitive listing of the obvious: "Fine grain film is slow and grainy film is fast," and "D-76 is the old pro's standby," and "Set your meter at the manufacturer's suggested ASA setting unless your negatives are too thin or too thick in which case you adjust," and "Develop for $7\frac{1}{2}$ minutes unless your negatives are too contrasty or too flat in which case you adjust."

But I had no way of knowing whether the negatives were too this or not enough that. I didn't know what to look for so how could I adjust? A Kodak bulletin I read said you could read a newspaper through a "good" negative. You can read a newspaper through an unexposed negative! Thanks, Kodak.

What I needed -- what everybody needed -- was a way to positively identify a good negative. If I could do that without relying on vague manufacturers' descriptions, "experience," or guess work, I figured that by good record keeping I could work backwards to the combination of exposure and development that made the good ones good.

I decided to start from the beginning with the question, "What is a 'good' negative?" Simple: a negative that makes a good print. How can you tell what kind of a print a negative will make? Print it. (I was gaining.) So far so good but print it how? That was the problem. No book I had read and no one I'd ever spoken with had any idea of 'how' to print it so that the negative would be the only variable. They proofed and printed their negatives to make them look as good as possible; they were always making

mediocre negatives which they subsequently doctored into mediocre prints. If they had, for example, a dense over-exposed negative and gave it a long exposure in the enlarger, they would make a better print from it than from a proper negative exposed for the same amount of time. That would look too dark. I was closing in; there must be at least a theoretically proper amount of exposure time for all negatives and if it could be identified and if all negatives were proofed the same, the good ones -- negatives that make good proof prints -- would look good and the bad ones -- negatives that make bad proof prints -- would look bad.

Suddenly it became clear that a shorter exposure than sufficient to print black through the clear film would be insufficient to produce black in the print, and proper negatives would appear in the print as too light. Conversely, more exposure than this minimum time to print black would print those properly exposed and developed negatives too dark. What I had been doing, like everyone else, was changing my proofing exposure time for every roll of negatives or sheet film negative to make them look good.

The solution became obvious. (Why hadn't anyone thought of it before?) If I merely determined by test strip the exact minimum exposure time to print black through the clear film and then proofed all my negatives for that length of time, the good ones would look good and the bad ones would look bad. No guesswork involved. I named it "the proper proof" and every negative I've made from the day I figured it out has been "proper proofed."

The refinements in both technical and esthetic quality that the proper proof makes possible enables the photographer not only to fine tune his visual and technical skills but also to choose the ideal negative to print.

Here's an example. Visualize a mountain meadow

in fall. The grass is yellowish, the sky is bluish, the clouds are wispy and whitish, and the hemlocks on the hillside are greenish-blackish. "Ish" means "sort-of." How close to or far from saturated those colors are and what values they will produce in a black and white print that will hold the atmosphere of that scene are subject to so many variables that you can only pre-visualize the print..sort-of. Experience tells you that probably the best bet would be a good full exposure with the highest value in the scene -- the clouds -- as high as you can get them without blocking. No filter. Placing the clouds on VIII, your exposure (in the fall in Vermont) is $1/25$ at $f32$, and you expose a negative. It feels right but... What about a little more separation? Should the golden meadow be a trifle lighter against the trees? You don't want to take the lightness, the air, the buoyancy out of it, but maybe just a tweak more separation? Maybe. You decide to try another exposure. A K-1 pale yellow filter is next to nothing; a $1/2$ stop factor, and you expose another sheet of film at $1/25$ between $22/32$ through the filter.

I bracketed! Well, sort-of. I'd prefer to say that I gave myself a "choice of negatives" and if that (or anything else I can think of doing) will improve my chances of getting the result I want, I'll do it.

The two developed negatives look identical to the naked eye. After all, the filtered negative shifted the values with some blue in them only about $1/4$ Zone (print value) darker.

Which negative is the one that will produce a print with the hoped for atmosphere? Proper proofing both negatives is the way to find out.

The proper proof is, after initial film speed and development time testing, the only control you need and it is the perfect way to fine tune your negatives

and choose the best negative to print. In spite of completion of an ASA test and a developing time test, you may find from your proper proofs that there is a problem. If a majority of your pictures are too thin in the low values, you are underexposing. The possibilities are that you made a mistake in listing your ASA settings on the test and the negative you thought you had exposed at 400 you really exposed at 300. That's common. More common is the possibility that you are placing your values lower on the scale than you should. There are a dozen other possibilities. Perhaps you tested on a cold day and your shutter was slow. Now it's fast and is cutting the cold weather exposure by 1/2 stop. Films change, meters change. Does that make the ASA test invalid? No, it is probably correct and at worst puts you in the ball park.

The proper proof allows you to refine the result. It shows what's happening and indicates adjustments to be made. Don't freeze up. If things aren't working on the proof, make them work. If your low values are consistently a full zone lower in the print than you placed them in the field, cut your ASA in half. But, you must know where you actually placed the values and that means you have to keep an exposure record to compare visualization in the field with the actuality of the proofs. If you don't know exactly what you did, you can't possibly correct it.

If you find that the proofs show that your negatives are too contrasty, cut your development time on your next roll 25%. Don't namby-pamby down to it 5% at a time. You'll quit before you get there. Surround it. Then interpolate a new time and use it. Refine it again if necessary. Keep fine tuning your exposure and development time through monitoring your proofs until you are at the point where every negative is exactly what you want it to be.

Easy to do if you keep records; impossible if you don't. Get an exposure record and use it!

All prints dry down to some extent; they look darker and show less contrast dry than they do wet. Figuring out how much lighter to print them to allow for drying down was always a matter of experience but even the best printers have problems judging. The different characteristics of different papers or even different boxes of the same paper make consistently good judgments difficult. Ansel suggests looking at the wet print under glancing light. How glancing? How bright a light? How far from the light? Which paper? It didn't help me much. I'd been toying with the idea of installing a rheostat to dim the light shining on the stand behind my fixer tray. I could set up a different dimming adjustment position for each paper to make it look, under the dimmer light, as it would when it dried down and was exhibited under brighter room light. I never did it because I suppose I knew it wouldn't work. Different is not the same and I'd be mentally compensating for the dim light. A sloppy control. Then I figured out a method that is so simple and foolproof that I'm embarrassed I had never thought of it before (until I remembered that no one else had either.)

1. Make a test strip and then a straight print from a fine full-scale negative that includes plenty of delicately separated high values. They are the delicate threshold values most affected by drying down. Make the print exactly as you would like it to look when dry. Make it without provision for drying down; make it so that it looks excellent wet in your usual darkroom viewing set-up. Write "pilot" on the back and also the exposure time, say, 20 sec. at $f/11$, and the development time, 2 min. Use a #1 pencil and write lightly "Pilot, $f/11$, 20 sec, 2 min" on the back of the print before you put it in the developer.

2. After it's fixed exactly five minutes, put the pilot print in a tray of water and, as it says in "The Joy of Cooking," set aside. Don't tone it. It can stay in the tray as long as 24 hours without harm.

3. Expose another print but expose it for 19 sec. in this instance and write "5% less" on the back. Don't develop this print yet.

4. Expose two more prints; one at 10% less (18 sec. in this hypothetical case) and one at 15% less (17 sec.) Write "10% less" and "15% less" on the backs and develop those three prints together for the exact length of time you developed the pilot print (two minutes is my normal time), stop, fix, everything the same as the pilot. Same paper, of course.

5. Finish processing the three prints in your normal manner, that is, if you usually tone, then tone, wash and dry.

6. After the three control prints are dry, set up the wet pilot print under the usual darkroom viewing light and compare the dry prints to it. Identify the dry one that matches the wet one. The first paper I tried was Ilfobrom #2 and the 5% exposure reduction was not sufficient (the "5% less" print dried darker than the pilot print). The "10% less" print was a touch too light. I could see that 8% less exposure would be perfect. On my dodging card I wrote "dry down for Ilfobrom #2 - 8%."

My new procedure is completely dependable. I just make the best print I can without consideration for dry down. Then I cut the exposure for the final print by 8%. That's all there is to it.

I have a work-up on the other grades too and they are quite different. Spend an hour, get your dry down percentages worked out for all the papers you use. Write it all down. Whether different emulsion batches will dry down differently I'm not sure but with this method of absolute control worked out I can always make the test and quickly find out what's happening with subsequent batches. Poor muddy papers will dry down much more than good ones (what good ones?)...than Ilfobrom.

Here's a letter that I got more than a year ago that I've been thinking a lot about.

Dear Mr. Picker,

The quote from Susan Sontag which opened Newsletter #16 hit home. I, and many photographers I know, seem to be "confined to projecting their own obsessions" (perhaps unknowingly). There are "arresting moments, beautiful subjects everywhere." This is painfully illustrated each time I see a photograph which makes me ask, "Why didn't I think of that?" or "Why didn't I see it that way?" HOW DOES ONE BREAK OUT and expand visual horizons, conceptual capability, etc?

Could (would) you please write a few (or few thousand) words on structured, disciplined ways to develop the ability to "see" photographically? Will art appreciation, design and other similar courses help? I have many of your books, and Ansel's, and others, and subscribe to "Aperture," etc., but there seems to be little progress in improving my basic ability to recognize a good picture. There must be ways to improve in this area, just as structured, disciplined study and practice will improve technical capability.

An article on this general topic in Newsletter #17 and/or #18 would certainly be appreciated.

Sincerely,
Bill Crowder

Dear Bill (if I may),

Thank you for your letter. I have been trying to answer it -- for both of us -- for a year but each failed attempt has made be more aware of both the complications inherent in your difficult but important question and in my inability to answer as clearly and accurately as I would like to. I'll

try my best.

It seems to me that any worker must first reach an advanced level of competence before he/she can even begin to approach the richer possibilities of whatever medium he is involved with. He must force himself to first excel in those areas that he can control through plain hard work.

Have you really worked? Have you trained yourself to guess most exposures within a half stop? Can you load and develop film better, cleaner, faster than anyone? Is your darkroom as neat and well organized as, say, mine? Are your negatives meticulously filed and are your proofs as elegant as most people's fine prints? Can you set up a tripod, mount, level, and focus a camera in 30-60 seconds? Does each negative jacket contain the date of the last printing and the materials, exposure, and procedure used? Do you own a dry mount press? Do you use only equipment and materials that will make the best possible pictures of what you want to photograph regardless of any consideration of cost, weight, convenience, etc? (Some people photograph still subject matter such as landscapes, etc. with a small camera because they don't want to load film holders or carry a tripod. They are destined to be hacks; more interested in their convenience than in photographic results.) My father told me (often), "It's easy if you work hard and hard if you work easy." Not true in photography; photography is hard if you work hard and impossible if you work easy.

Reach a point of technical competence quickly and finally so that technique is behind you forever. Don't waste time. Simplify. Be consistent. The people who diddle around endlessly with technical experimentation do so to avoid the necessity of going out into the world and putting their pictures on the line. Most people think their pictures are weak because their prints are weak. They are wrong. It's the other way 'round.

I would advise you to forget about "structured ways of seeing." What structures did the people who could perform employ? Can anyone describe the compositional elements of Strand's "Family Luzzara" or Weston's "Excusado"? Weston, Atget, Strand, and Stieglitz had vision far beyond the authors of books that deal with "leading lines" and "the rule of thirds" and similar hogwash. Weston's Daybooks exhaustively address every aspect of photographic approach (have you studied the Daybooks?) and yet he saw fit to dismiss the whole topic of "composition" with just seven impatient words: "Composition is the strongest way of seeing."

That marvelous mysterious teetering balance -- visual, intellectual, spiritual, emotional -- that exists in the finest photographs, paintings, music, and writing comes out of the spirit of the artists' living and any describable compositional or structural elements that might appear in the work are after the fact and inconsequential.

People with no feel for the exquisite nuances that affect the artist intellectualize art to death. Weston wrote, "...you don't explain a Bach fugue. If you could, you would explain away its very meaning -- its reason for existence."

Feel it, love it, don't talk about it, don't worry about it, make the picture. Beware of teachers with theories; listen only to those whose photographs show they know something. Expect failure; it's an integral part of the creative process. Study your failures and learn from them but remember that no matter how expert you might become, only a small percentage of your negatives will deserve a print. No one has ever batted 1000 (though I'd guess Atget came closest). We can visualize only to a point. We can, for example, visualize the approximate tones of gray that will appear in a print, but no one at the time of exposure knows that the photograph he made will soar or be just another also-ran.

We try, we hope, we continue to improve if we're lucky (or go stale if we're unlucky) but we never know until we see the print whether it will transmit the magic we responded to when we tripped the shutter.

Where does the magic in any medium come from? Why is it that when Horowitz or Menuhin perform, the audience is so taken out of itself that it is too limp to applaud until five seconds after the piece is over? Many young virtuosos of equal (or greater) technical ability play the same music but with the wooden insensitivity of those photographers who plot curves and test developers. The difference comes from what the individual performer or artist has experienced in his life, his response to it, and his ability to transmit that response through his work.

Success in photography is like success in anything -- not available to those who don't know what's possible. You can learn what is possible in any medium only by studying the work of the champions who have pushed against the boundaries of their own limitations. Do you live with Mozart, Bach, Rembrandt, Frost, Miro, Picasso, Matisse, Ingres, Calder, and Nevelson? Do you know the music, the poetry, the literature, the painting, the dance, and the sculpture that defines the borders of our civilization?

Strand learned from everything. He told me that if a photographer really wanted to learn about landscape he should study the work of Cezanne, not the work of another photographer. He once went on a trip through Europe just to see every Piero de la Francesca painting he could find.

Have you studied the photographs of the masters? How well do you know the work of Atget, Curtis, Lange, Stieglitz, Siskind, Strand, Weston? Do you own a library of photographic books (not technique books; PICTURES)? Here's the key question: Have you bought photographs? I find it amazing that so many who call

themselves photographers actually care so little about the medium that they have never once been sufficiently moved by a picture to want to own it. If you've not bought prints, it might not be amiss to ask yourself if you really care about photography at all...

Sooner or later we are alone and up against ourselves. We can do no better than we are and no one can help us more than superficially. If we should ultimately fail (and most of us will), the important thing is to at least know that we gave it the very best we had.

To give it the very best is impossible without a discipline that borders on belief; the sort of belief which is commitment without reservation. La Fontaine wrote, "Man is so made that whenever anything fires his soul, impossibilities vanish."

It's harder to do it alone. Come to a workshop if you can. I'd like to look at your ground glass and find out what you think you don't see.

You wrote a letter to a stranger asking for help. You described inadequacies and frustrations that plague us all in varying degrees but that most of us don't have the courage or the honesty to face. For that reason alone, I am sure that you are much closer to where you would like to be than you think.

With warm regards,

A handwritten signature in black ink, appearing to read "Fred Fisher". The script is fluid and cursive, with a large, stylized initial "F".

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ZONE VI Newsletter

NEWSLETTER #23
December 1979

"And there's a dreadful law here -- it was made by mistake, but there it is -- that if anyone asks for machinery they have to have it and keep on using it."

Edith Nesbit, 1910

Zone VI is constantly bombarded with sample products from manufacturers of photographic hardware. They know that a listing of their product in our catalog represents an endorsement that photographers respect and that will make their sales, all over the country, increase. I don't spend the time to check out the many obviously silly products but I give everything that looks possible at least a quick try. I have checked out four lenses that are half the price and "just as good" as a Symmar. (Some suppliers say they are Symmars in sheep's clothing.) They are half the price all right but when given the standard lens agony treatment -- a single photograph of bare branches at infinity against the sky -- they deliver a mess of steel wool in the print instead of strands of barbed wire.

Meter design and production seem to bring out the worst in manufacturers. The very thought of making a meter causes them to busy their heads with inventing complications which will ultimately transform what should be a simple, straightforward, accurate photographic tool into a complicated inaccurate, expensive, unreliable gadget.

Good meters can be made. They have been made. The best meter for precise work, if you could figure out a way to read it, was the now unavailable S.E.I. It was designed more than thirty years ago. Other less sophisticated but honest and dependable meters of real quality were the Weston V (the very best of

the Westons) and the Luna Pro (the best of the Gossens). Of these two, only the Luna Pro is still available.

My first serious meter was a used Pentax 3 degree spot meter. It was the best thing around, except for a new S.E.I. which I couldn't afford. The 3 degree was a really dumb design. You had to look down into it as into a Rollei or Hasselblad. That meant that your readings were all made from the elevation of your navel. To make a reading along the lens axis, assuming a lens at eye level, you either needed a ladder or, as with a Rollei, you could hold it at eye level and see into it only by facing 90 degrees away from the subject and laying the meter -- or camera -- on its side. The 3 degree circle was very approximate, as are today's 1 degree circles. (As you swing the average spotmeter from a darker area toward a lighter one, or vice versa, the needle begins to react long before any part of the light or dark area enters the circle.)

When I began professional photography, I needed the best available tools. Architecture and industrial interiors, in which I specialized, are especially tricky; you need an accurate and dependable meter not only to assure proper exposure but to help you set up the lighting balance. I swapped the 3 degree for a new 1 degree Pentax, and then another, and finally a third. Those things lived in the shop and every time they came back they were non-linear in a new and astonishing way.

Through necessity I was getting very good at guessing exposures and Polaroid film helped with the lighting.

Though it intimidated me by its complexities, I finally bought a $\frac{1}{2}$ degree S.E.I. photometer and after a while figured out a zone dial for it. I wrote it up and if you would like a copy send a SASE for "Taming the S.E.I." Although these meters are superb, I would not suggest you look for a used one because repair facilities and replacement parts no longer exist.

Zone VI recommends the Luna Pro, a fine meter once it has been modified with a zone dial. It is not a

spot meter in its original configuration though there is a 1 degree spot attachment available. We found the spot attachments to be Mickey Mouse things that give erroneous readings. If you have a Luna Pro with attachment, make two close-up readings of a smooth toned object, one with and one without the attachment. Exposure information should be the same for both. It seldom is.

We think the Soligor 1 degree is the best meter currently available, if you get a good one. The odds? Out of the last fifty we received, twenty-eight were turkeys and had to be sent back.

I recently tried out three generally well thought of (expensive) meters in an attempt to find something better than those we currently sell.

One was a Weston Euromaster. It was such a plastic, lightweight, junky thing compared to my old Weston V that I disliked it as soon as I picked it up. The dial was "improved" to illegibility and it still had the silly "O" (Zone VIII) for Overexposed and "U" (Zone I) for Underexposed. It still had the "C" (Zone VI) for Contrast and "A" (Zone IV) for -- so help me -- Absence of contrast!

It wasn't in a class with the Luna Pro.

The next one was really silly. It was a Quantum Aculite, or something like that. It had the newest thing...a digital read-out. Using it I found that:

1. Digital is more difficult to relate to visually than a needle, as designers of scientific instruments know.

2. As you sweep the meter over the subject, the light value number doesn't change. It holds the first value it saw. You have to keep pushing a button to read other values. If you push the wrong button, which is identical to the right button, you get the previous reading...and you don't know it!

3. It is unzonable.

4. The ASA and DIN windows are side by side and identical. This is certain to lead to error.

5. The main dial indicator (Zone V, supposedly) is a slim line. It is difficult to see in bright light. In dim light it is invisible.

6. There are set-ups for both reflected and incident light. They are identical windows and if you read the wrong one, you'll make an error. There are ambiguous pictures, arrows or something, that are supposed to indicate which is which.

7. The ASA dial can not be locked and you will surely turn it to another ASA as you manipulate the dial. It's like focusing a Nikon and simultaneously changing the aperture by mistake, which is hard not to do. (I tape the Nikon aperture ring.)

8. The number on the digital display shows a number and dot set-up but that combination can not be set on the dial. You have to translate...another annoyance that invites error when working quickly.

9. All that nonsense would be tolerable if it was accurate. But it is not linear; ASA 600 for proper Zone I was required for a normal low light level Zone I situation. That ASA setting indicated an exposure of 1/500 at f/22 on sunlit snow placed on Zone VIII. That's a three stop underexposure. The proper snow exposure in that particular light was 1/60 at f/22.

Why does that useless thing cost \$200.00 when you can buy a pocket calculator with an eight digit display (instead of two digits) for \$10.00? And the calculator is accurate.

The last meter I tested was a \$450.00 Pentax digital. To get a .10 density for Zone I at low light levels it had to be set at ASA 800. That same ASA setting gave an indicated exposure of 1/1000 at f/22 for sunlit snow on Zone VIII. That's a four stop underexposure. The worst of the Soligors are off two stops. It was worse than a Gossen SBC. For every

\$100.00 you spend, it's off one stop!

I asked executives of all three of these companies why they don't ask photographers to try equipment before it is produced or to act as advisors during the design or concept stage. The answers boiled down to, "We have to design equipment that will appeal to camera store buyers, equipment that will influence a photographer to trade in his obsolete equipment."

There is one meter that has been around since the first photograph was made. It's dependable, accurate, needs no batteries, can't be left at home, and it's free. It's the human brain and in the next Newsletter I'll describe how to use one as a meter.

*

About ten years ago Paul Caponigro showed me a student's photograph of a wood stove. It was an undistinguished picture and I've seen many better student photographs during the intervening years. What made that one memorable was the quality of the print. There was an impression of light and substance and the stove almost seemed to come forward. There was an illusion of three dimensional space in the print.

An accomplished photographer can cleverly utilize a lot of visual artistry to suggest presence, substance, and space. To provide a spatial impression he might carefully overlap objects or place a small object near the lens so it will be large in the print and place a large object far away so that it will be small in the print (the "near-far" effect that Ansel Adams handles especially well). He might, by precise camera positioning, create an optical illusion of space by continuing a line or a tone of one object through another. This is hard to explain, but if you have my new Monograph, look at picture #13, Gerdar, Iceland, 1974. The gray concrete wall at the back of the graveyard passes behind seven planes of other objects and reappears, but it's not the same wall. It's a wall closer to the camera. Depth can also be suggested by horizontal planes. In that same photograph there are 13 clearly defined planes from foreground to horizon. Horizontal bands of sequentially lightening tones en-

hance the illusion of space. Positioning the camera so that a light object, say a birch tree, shows at its edge the finest black line of a dark-barked tree behind it will make the birch come forward strongly and appear to be very sharp. There must be hundreds of ways to create visual illusions in our photographs and I'm sure we use them unconsciously all the time. That's proper; sometimes you have to lie to tell the truth.

There was no such visual sophistication in the picture of the stove. The strange illusion of touchability -- space, presence, light -- in the print came only from the paper it was printed on. Paul told me the paper was Cykora. Why did Cykora work that way? I did some research and learned that there are some emulsions that contain a combination or balance of ingredients that make them more than usually susceptible to such adjacency phenomena as Edge Effects, Eberhard Effect, and Kosinsky Effect. What's that?

According to Todd and Zakia in "Photographic Sensitometry" (Page 122), "The diffusion of fresh developer from the low exposure area to the adjacent high exposure area will cause an increase in density which is most pronounced at the boundary of the two areas. The combination of unusually high density adjacent to an unusually low density is often referred to as the 'Mackie line'."

Whatever. The effect is a fine dark line that appears along the edge of an object if that object is adjacent to another of a different tone. The stove had a 'Mackie line' around it that made it appear to stand out from the background. You could not notice it as a line -- it was subtle but it was there -- and it was what was creating the effect. I have a print on Cykora of Caponigro's Running White Deer. It is one of the most beautiful prints of one of the most beautiful photographs I've ever seen.

Cykora was off the market but I was able to find two boxes of outdated single weight 11x14 in the basement of a New York camera store. I used it with a lot of benzotriazole to clear the fog of age and, in spite

of its less than perfect condition, it produced prints whose spatial quality I could not duplicate on any other paper.

Last Spring my publisher asked me to go to the photo equipment show in Chicago to sign books. I agreed only after he promised that I could be in complete charge of the design and production of my monograph.

The show was awful. There were 10,000 camera store clerks arguing about the relative uselessness of the sales features of the latest ultrasonic plastic Minolta, etc. It would have been a complete disaster except that I met a representative of a small European company which is primarily a manufacturer of specialized graphic arts materials but wanted to interest someone in importing a quality fiber base paper. The representative was not a photographer and could tell me little about the various samples he had except that they were "very fine." I took some paper home and, without much enthusiasm, made a print. Cykora! If not Cykora, it was, as they used to say on the radio, "a reasonable facsimile." It had the brilliance, the depth, the edge effect, and it had a much better color than Cykora. Cykora was strongly olive but this paper had an exquisite color. Does it sound strange to talk about a cold brown? If you have seen gold-toned Ilfo-mar, you will know what I mean.

I called the company and, though the size of the order they required was scary, they were most cooperative and even agreed to several changes; a whiter paper base, a more refined surface, and a totally silver saturated emulsion.

Silver, lots of silver, is what makes blacks black and all advertising malarkey about "superactivating" silver or achieving richer blacks by plastic coating, etc., is no more than a \$30,000 advertising man explaining the economies invented by a \$30,000 production man. The paper manufacturer should have spent the \$60,000 on silver, as we did.

The paper is here and it's beautiful. I made all

the prints for my New York show on it and all the prints for my book. Those who have ordered "Fine Prints" from the Zone VI catalog have seen it. Last summer's workshop students saw it in my darkroom. I remember one comment; when I turned on the overhead light and they saw the print, someone said, "Light comes out of it."

In Newsletter #21 I described Galerie paper where the grade 2 was about a $1\frac{1}{2}$ and the 3 was a 4. Not good. Our grades are evenly spaced. I also mentioned that the different grades should be matched for speed at the threshold (high values) as this would permit you to make a print on, let's say, grade 2 at 24 seconds and then match the high value with a 24 second exposure on grade 3. Only the low values would change. You can do that with "Brilliant" -- that's its name.

"Brilliant" is an old-fashioned 100% bromide paper. It contains no chloride. It exhibits the high speed characteristics of bromide...it is about 60% faster than Ilfobrom and about one-half grade contrastier than Ilfobrom for corresponding grade numbers. It's at least a grade contrastier than the tired American papers. (Our #3 is much stronger than Polycontrast #4.)

"Brilliant" costs more to produce than any silver paper ever made, not only because of its quality but because of the relatively small run that we could handle. Nevertheless, we can keep the selling price the same as Ilfobrom because we will not be selling it through stores or promoting it in full page magazine ads.

Your support over the years has made a venture of this magnitude possible.

We are most appreciative.

"Her voice is full of money."

F. Scott Fitzgerald
"The Great Gatsby"

Photography critics often praise minor work simply because it's different...in approach, attitude, subject matter, or technique. Typical example: a European photographer has recently received much critical acclaim. He makes dirty pictures. Just plain, old-fashioned, kinky, sadistic, male-chauvinist porn. Reviewing this kind of work gives the critics a chance to run one or two halftones that are sure to attract attention to their column, and embracing (excuse me) work of this caliber illustrates how "liberated" they (the critics) are. That could lead to becoming "controversial" and even "interesting" and, who knows, maybe some day "famous." That's one way some critics operate; it adds nothing much to our knowledge or appreciation of the medium and encourages young people to do more of the kind of work those critics seem attuned to.

There's another sure-fire way critics can attract attention. They can attack an acknowledged master, which is what Vicki Goldberg did in a recent issue of American Photographer. The article was entitled (or catch-lined in the traditional cute, slick, Mad. Ave. manner), "Is Ansel Adams Overexposed?" Ms. Goldberg's first sentence sets the tone. "It's getting hard to see Ansel Adams clearly what with all the money and publicity."

Statistical back-up follows: "300 copies at \$75 in 2½ hours," "\$2,500 de luxe edition," "Time cover," "Bill Turnage (PR man) has a Rolls Royce," "TV commercial for Datsun," "\$800 (price of Moonrise in 1975)," "\$3,500 (price in 1978)," "\$8,000 (1979)," "\$12,000 (late 1979, Christie's auction)," "Adams is a millionaire though it is worth remembering that the dealers, and some collectors, reaped the most astronomical of the profits."

Why is it "worth remembering"? Who gives a damn?

Some critics have discovered that it is a lot easier and makes better copy to concentrate on the

dissemination of gossip about an artist than to examine his work in depth. Speculation about Van Gogh's ear or Weston's love life are cases in point. Ms. Goldberg concentrates on money.

The article goes on to say, "Adams does try his hand, especially around 1960, at almost total abstractions of foam on water or rock erosion, but Minor White and Edward Weston did it better." To illustrate the poverty of this level of criticism it is only necessary to change the medium and the characters: "Tchaikowsky does try his hand, especially around 1880, at a violin concerto but Beethoven and Brahms did it better." A. D. Coleman described this kind of comparative criticism as "taste mongering" and in a talk he gave at NYU on December 10, 1974 he said, "This writer (he was discussing various types of photography critics) uses his categories judgmentally to separate those artists whose sensibilities he appreciates from those he dislikes. The latter are lumped together and dismissed en masse without their individual crimes ever being specified...a form of esthetic Stalinism."

The Goldberg article ends exactly where it began: "All those effulgent sunbeams, vaporous waterfalls and glowing dollar signs have made him hard to recognize let alone appreciate."

Well, I haven't any problem recognizing and appreciating him because I haven't any problem looking at and understanding the PICTURES. That's what it's about and that's all it's about. When Ansel stood behind the camera in front of that fantastic spray of aspens glowing in the storm light of New Mexico, or waited for the dawn to do what it finally did to Lone Pine Peak, or was transported by the way the clouds recreated a Beethoven symphony over Tenaya Lake, or fought his way up thousands of feet through the snow, carrying a camera that mysteriously turned into lead, in order to record the face of Half Dome, or experienced 10,000 other intense moments in a lifetime dedicated to a search for significant revelation, neither he nor the subject nor the camera was aware of whether he arrived by shanks mare or Rolls Royce.

When you are out there and it's time to produce,

no amount of wealth or fame or fancy gear -- nothing -- will be of the slightest help. You are totally dependent on your vision, your intelligence, your experience, your skill, and your humanity.

I'm reminded of one of Bern's stories. Vladimir Horowitz was asked to judge the performances of a dozen young pianists. He was directed to score them from zero to twenty. After hearing all twelve, he handed in his score sheet. He had given ten players a zero and two players a twenty. When he was asked why the scoring took that particular form, he replied, "Some people can play the piano and some can't."

Well, Ansel can play the camera (he can play the piano, too). He is the premier photographer of a brutally difficult subject, the grand landscape. No one in the history of the medium has ever done it better.

The position taken in Ms. Goldberg's first and last sentence is reinforced midway in the article: " (I) find about 90% of Adams' landscapes too gorgeous for words, and they have none for me." I appreciate that a critic (or you or me) has every right to make such a statement but I remind Ms. Goldberg (and you and me) that the problem of non-communication between artist and audience, throughout history, has been almost always the audience's problem. This is certainly not to say that there is something worthwhile to be found in all creative attempts, but when I contemplate the work of an acknowledged master and think he has no words for me, I make sure I look again before deciding whether it was he or I who missed the boat.

The more intense your work, the smaller the audience that will appreciate it. As work becomes more personal and more involved, it often becomes complicated. That makes it less accessible. But that's not your problem. Whatever reception your work receives is outside your control and of minor importance. Sure, if someone you care about is moved by or just enjoys your work, that's nice. If acceptance comes in the form of a show or a good review or if people buy your prints often and for high prices, that's nice too, but all that is external, after the fact, probably transient, and of little import-

ance when compared to the doing of it. You do it for yourself and the reason you do it at all is that you really have no choice in the matter. The minute you become a politician playing up to the photographic bureaucracy, your creative growth stops.

I like the way A. D. Coleman said it, "Museums and galleries and magazines and critics too often function as star-makers, intentionally or not. Seeking certification for the significance of one's work from these sources, rather than 'building a poetry of one's own' whose significance needs no external verification, has the effect of addicting the artist to the support of others and locking him or her into whatever style or subject matter has gained this approval. It is essential to develop an attitude of indifference to other opinions if you are to get on with your own work."

And so it has been with Ansel. He has always believed in what he was doing. Birds don't ask themselves why they sing and Ansel didn't ask himself why he made pictures. He just did it, unconcerned about what anyone might think he was "saying."

Mel Brooks, the comedian, said something in an interview that made me think of Ansel and the wonderful body of work he has produced, "I've tied myself to no end but the joy of observation and I need to pass that on. I'm a celebrator. That's why I like the Russians. They'll look at a tree and cry out, 'Look at that tree!' They're full of original astonishments."

And so are you, Ansel, and so are you.

I wish you health and joy,

A handwritten signature in dark ink, appearing to read "Fred". The signature is stylized with a large, sweeping initial 'F' and a cursive 'red'.

ZONE VI Newsletter

NEWSLETTER #24

April 1980

"...rage, rage against the dying of the light"

Dylan Thomas

Most photographers, including professionals, are lost without a meter. Many people think that estimating exposures accurately is impossible, but a lot of the great photographers of the past never owned a meter. None of the early ones did. I have heard that Edward Weston was given one near the end of his career but, though he used it now and then, he seldom did what it told him. You can get into a lot of trouble with a meter if you don't know what it actually does. For example, if Weston had used a meter in determining exposure for "Church Door, Hornitos," which is an exquisite detail of weathered white paint in sun, and followed the meter without compensation he would have made an under-exposure of seven or eight stops. To begin with, the meter would have indicated a Zone V exposure and that would be a three stop under-exposure because white paint in sun "belongs" on VIII and that's where Weston wanted it, as can be seen by looking at the print. The print value is VIII.

To make it worse, the film was probably slower by half than the manufacturer said it was, so that makes four stops, assuming the manufacturer's speed rating was set on the meter. Weston developed his films in Pyro. Pyro negatives require more exposure by one or two stops than negatives to be processed in the usual developers. By now, he would be five or six stops under the desired exposure. There's more: Weston contact printed on platinum or palladium paper and for that you need a denser and more contrasty negative than is required for silver printing, and that requires more exposure. All together, the meter would have indicated a seven or eight stop under-exposure. My guess is that Weston metered with it once or twice, decided it was crazy, and went back to tried and true seat-of-the-pants exposure determination.

Even though we might have access to an excellent meter, I think it is advantageous, both technically and esthetically, to learn to judge light and determine proper exposure without reliance on a meter.

I worked out a procedure years ago to eliminate variables and by following it consistently I can now hit my exposures within a half stop. You can too; merely follow the simple directions. Unfortunately, studies show that more than 90% of any audience is unwilling, incapable, or just too stubborn to follow explicit instructions exactly! If you are one of the 10% who will actually do it (reading it is not doing it, by the way) and if you can avoid modifying it or "improving" on it you'll find it works.

If you follow the directions exactly, you'll find no time-wasting fat in the procedures described; they are pared right down to the bone.

In the setting of a lens for a proper exposure there are only four possible errors because there are only four variables. The possible errors: (1) too fast or (2) too slow a shutter speed, (3) too large or (4) too small an f stop. First step: adopt f/22 as your F stop. Don't think... adopt f/22. By doing that you have just eliminated two of the four variables. The two remaining variables are too fast or too slow a shutter speed. We can eliminate "too fast" by finding the fastest speed we will ever use. That speed is the one that will give us a "proper" exposure on the brightest day we will ever encounter. Once we locate that fastest possible shutter speed, which we will do by test, it is obvious that all exposures must be made only at that speed or at some slower speed. I call that fastest speed my Key Exposure and it is always used on a Key Day (the brightest day that we will encounter) and it is used with the ubiquitous, non-varying f/22. I'll try to gather all this together more formally:

The Key shutter speed combined with an f/22 aperture will, on a brilliant cloudless day -- a Key Day -- produce a negative that will reproduce subject reflectances as traditional print values when the negative is printed as a "proper proof."

It is as hard to read as it was to write; please read it again.

First you have to find your Key shutter speed. Everyone's Key will be different. Shutter speeds vary, apertures might vary, surely atmospheric conditions in various parts of this or other countries will vary, and film speeds vary. In Vermont there is no dust, smog, or industrial pollution (but don't come, there are no jobs either). A Key Day here might be two or three times brighter than a Key Day in L.A. or one or two stops darker than a Key Day high in the Rockies or the Sierras. There is a simple accurate way to find your Key Day exposure and it cancels out any variations in equipment performance or geography.

To choose a Key Day for your test: Look up; make sure that there is no fleecy veil of cloud between you and the sun. Look down; you'll see that the shadows are sharp-edged and definite. That's a Key Day. You will find your Key shutter speed by actually making a perfect Key Day negative.

Choose a scene that has a wide reflectance range, including areas of fresh white paint in sun and dark colored areas in shade. A white painted building with its sunny side toward the camera is probably the best choice because the large smooth areas are easy to evaluate in the final print. There should be some shadowed areas from roof overhangs, etc., some dark colored areas like dark painted doors in both sun and shade and also some very dark areas such as basement window wells,

Tripod the camera, set $f/22^*$.

Make an exposure at a shutter speed of $1/250^{**}$ of a second.

Make a second exposure at $1/125$ of a second.

Make a third exposure at $1/60$ of a second.

Make a fourth exposure at $1/30$ of a second.

These exposures assume Tri-X film; for Pan-X start at $1/60$, $1/30$, etc.

Develop the film normally. This test assumes that you have completed a development time test and have located your normal development time. Make a proper proof of the four negatives. You'll have no trouble at all locating the print that "reproduces subject reflectances as traditional print values." That's the one where the white paint in sun not only looks, but feels, like white paint in sun; where luminous shadow areas in the scene are luminous in the proof.

The shutter speed used to make the negative that produced that proof is your Key shutter speed. It will always "reproduce subject reflectances as traditional print values" when used with $f/22$ on a Key Day. You might think of it this way. Assume

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* Some small cameras can't be stopped down past $f/16$. If you have one of them, use $f/16$ and start with $1/500$ of a second, then $1/250$, etc.

**Don't use $1/250$ if you have a view camera. It is probably inaccurate and you never use it in actual work anyway. For the first exposure, use $1/125$ at $f/32$, then follow with $1/125$ at $f/22$, etc.

you photograph a weathered gray barn on a Key Day using your Key Exposure, the barn will appear in the print in accord with the light it reflects. If it reflects 18% like a gray card -- my barn does -- it will print properly, that is, as a Zone V. If a white person suddenly steps before the camera as you expose the barn, his face, reflecting 36% (more or less) will reproduce as a Zone VI. Try it. It works.

There are no variables for a Key Day exposure. The Key Day exposure is made with the shutter speed determined by test and the f/stop determined by law!

Non-Key Days are darker than Key Days so we must give more than Key Day exposure. How much? Look up; are there thin fleecy clouds? Look down; do the shadows have soft edges? If so, double the exposure. Always set the Key Day exposure first regardless of the kind of day it is. Then, open up one stop or halve the shutter speed for a soft shadow day. (Either will double the exposure.)

For gray days, when you can barely make out a faint shadow on the ground when you wave your arm, halve the shutter speed again. You are now two stops from your key exposure. If you can't see any shadow when you wave your arm, open another stop. Use a Field Data Guide so you can keep a record of what you are doing. If you keep records, in no time you will get up in the morning and say, "It's a 1/125 (or a 1/60 or a 1/30) day."

Nothing can work automatically all the time in an expressive medium, but the Key system works very well if you temper it with judgment. There are variations. For instance, it is not as bright very early or at sunset as it is in the middle of the day: snow moves everything up a full Zone because it reflects light that is absorbed by bare or grassy ground. Be alert, be flexible, take notes, practice.

Is that it for meters? No. There are times and situations that are not all that easy to figure. You need a meter at dusk or dawn when you can barely make out the image on the ground glass. It's tougher to guess the exposure when there are no shadows, but in that middle range your meter is most accurate. They are off (when they are off) at the highest and lowest values.

I received a letter from Ansel Adams in which he stated, "I have found about 50% of all the meters examined at our Yosemite Workshop prove to be at fault." We have the same experience at our workshops and, in addition, of the last shipment of meters received from the manufacturer, Rick returned more than half as non-linear. A non-linear meter is worse than no meter because misinformation is worse than no information.

Even when using a light meter, get in the habit of guessing the exposure before you take a reading. It's good practice and will stand you in good stead some day. (Suppose you are in India and your meter breaks?) You can also get so good at guessing that you can win a lot of bets. The trick is always to use $f/22$. If you need more depth of field you might end up at $f/45$ but think $f/22$ and set $f/22$ on your lens. Then, after you have the proper shutter speed set for the exposure, you can change both to an equivalent exposure combination if you want to. But do it in two steps; first set $f/22$ and your Key shutter speed, then re-set the speed or the aperture or both. People make mechanical errors because they are not consistent. Don't skip steps. Don't try to do two things at once.

There's something special that happens when you set the speed and aperture the same each time (the Key shutter speed and $f/22$) and then change it physically. It is hard to explain but it is vital to the whole process. You are looking at

the subject as you manually add exposure by changing the shutter speed to slower and slower numbers. When I get to the right number....I KNOW it. Sometimes I go too far and I know it and back up one speed. I can feel it. Often, I'm slightly uncomfortable so I open up or close down a half stop. Then I'm comfortable. I'm sure the early photographers did it just that way. After a while it becomes as instinctive as making steering corrections while driving a car.

The Key Exposure will give you "realistic" values. If you wish to "depart from reality" and render all tones lighter or darker than their "traditional print values" just open up a stop to make all values one zone lighter, close down a stop to make them one zone darker. Frankly, I never do that in the field; if I do it at all, and I seldom do, I do it in the darkroom.

I still use a meter but if it goes against my experience I'll make two exposures, one of which will be my guess. I'll write down which was which - with roll film you can write down the frame #; with sheet film, which has no numbers, I put a lens cap or something just inside one corner of the picture area and write, "lens cap-f/22 at 1/30, guessed". If my guess is right, I'll have the meter fixed. If it's wrong, I'm learning, and probably won't make the same mistake again. (If you never make the same mistake twice, you'll soon run out of mistakes.)

What happened to the Zone System? Nothing. It's still operating. Here again, you can easily learn relationships by doing a little thinking and employing a consistent approach. If you make notes you'll find that tonal relationships are constant and dependable. For example, go back to the test exposure of the white building in sun. It shows the white paint in sun falls on Zone VIII. That's proper and we would reject that exposure as the Key if it didn't. The white paint in shade is $2\frac{1}{2}$ zones

lower; a meter would show it falling on Zone $V\frac{1}{2}$. Since the dark door also reflects $2\frac{1}{2}$ stops (zones) less in shade than in sun, you can say that any object in shade reflects $2\frac{1}{2}$ stops (zones) less than that same object in sun regardless of its color. Try it. You may get a three zone difference in the blinding clarity of high mountains or a two zone difference in the smog of Los Angeles; $2\frac{1}{2}$ is what it is in Vermont.

Other relationships; the difference between black and white objects, assuming both are in either sun or shade, is five zones (stops). That's the relationship anywhere in the world. Knowing that, and knowing that you lose $2\frac{1}{2}$ stops (zones) in Vermont when an object is in shade, the difference between white paint in sun (Zone VIII) and black paint in shade (the shaded part of the shutters) is $7\frac{1}{2}$ zones. Here's why: A five zone difference between black and white plus the $2\frac{1}{2}$ zones that we lose in shadows gives us a difference between the white paint in sun and the black paint in shade of $7\frac{1}{2}$ zones (stops). So the picture shows white paint in sun on Zone VIII, the white paint in shade on $V\frac{1}{2}$, the black door in sun on III (five zones lower than the white paint in sun) and the shaded part of the black door is $2\frac{1}{2}$ zones lower than III so it's on Zone $\frac{1}{2}$! Everything is in order, everything is predictable. After a while you will be able to look at a scene and not only announce the exposure but describe what zone every important value will fall on. Your new-found confidence will have a profound effect on your work in many intangible ways.

One concept that a lot of photographers and every photographic writer (except Ansel) that I've ever read have adopted is the erroneous notion that black will appear as black and white will appear as white in a photograph. As the above example illustrates, that will happen only when the black is in shade and the white is in sun (or in direct artificial light).

What is all this leading up to? You already paid a lot of money for a meter and it works fine and before now no writer ever suggested you guess your exposures. Why bother? Will evaluating the light without using a meter help you make better pictures? (If not, it's useless.) I think it will. I think that anything that brings the photographer closer to the raw processes, the feel of photographing, the feel of the light that's out there, is advantageous. Consider the extraordinary results of early photographers who not only had no meters, but used other equipment that we would consider archaic. Have you wondered at their ability to overcome those equipment handicaps? Look at the magnificent landscapes of O'Sullivan, the portraits of Nadar around 1860, of D. O. Hill and Curtis and the Paris of Atget. O'Sullivan had to set up a light proof tent, mix an emulsion, coat a glass plate, put it in the camera, make an exposure (you can bet he made the right one) and then he would take the plate back inside the tent, develop the plate, wash it, dry it, pack it back on the mule, and press on in search of the next picture. They all made exquisite pictures.

There was a far higher percentage of good photographers in the early days when the mechanics of it were difficult because the people who didn't care enough about it to undertake the great effort required to make even a single exposure dropped out (or never took it up). Those who lived to photograph stuck to it and they were forced by the disciplines imposed by the equipment to think. They didn't go about snapping away at this and that in the vain hope that they would get something good by the law of averages. (A very over-rated law, as can easily be seen by looking at any motor-driven contact sheet.) They photographed only what they felt so strongly about that it was worth setting up the tent, etc., etc.

The test I've outlined is not a lot of work compared with what earlier photographers went

through but still some will ask, "Isn't there an easier way?" Certainly. There is always an easier way. Take your meter out on a Key Day, read all the values, place them on appropriate zones, note the shutter speed that goes with f/22 and there you are with the Key Day exposure. Time required; one minute. But nothing happened, you didn't do anything. By the same token, why make all those prints for each zone as directed in "Zone VI Workshop"? You can see what zone this or that looks like because they are all neatly laid out for you in the front of "The Fine Print" book. The reason to go through the process is that you learn only by doing, by touching, by experiencing. You gain confidence, not only in your technical ability - that is the least of it - but in your understanding of what you can do to affect your photographs, how you can affect your materials and how you can work them toward your expressive ends. Most of today's photographers are nothing but machine operators and we have to get away from that. I wish I could write like James Agee; he could explain why it is absolutely essential that when making a print you touch it with your hands, not tongs; not because the touching will make the print different but because the touching will make the photographer different. For the same reason you will make better photographs with a camera that doesn't have batteries or tricky modern things on it than with fancier ones. I'm not sure if that is because the kind of person who likes the tricky things is less apt to be as sensitive to the vital intuitive aspects required for expression in any medium or whether the knowledge that the thing is mechanical removes any possibility of intimacy.

"The thing I find extraordinary in photography is that many today think that good craftsmanship is unimportant. There is no great art in the world... in which feeling for the material wasn't present. The artist tries to

re-create the material, heighten the beauty of the material, not as a thing in itself...but in order to increase the expressiveness of whatever it is he is trying to say."

Paul Strand, in Popular Photography, 4/72

I spent a week in 1972 in Deer Island, Maine with the great artist Leonard Baskin. One day a truck arrived carrying a huge block of marble. Baskin couldn't take his eyes off it, he couldn't keep his hands off it. I asked him if he had any ideas as to what he would do with it. He said if he touched it long enough it would tell him. The literal minded will have trouble with that kind of thinking but people who speak that language know exactly what Baskin meant and they know that if important work is to happen it can't be any other way. Of course stones don't speak; anyone with a sensitive microphone and a knowledge of diodes knows that. But do they know that stones don't reflect your brain waves, like radar, clarify your thinking and reflect it back to you, amplified or refined, so you see (hear) (feel) more clearly? No matter; only if you think that can happen is there the possibility of it happening.

They set the marble in a hay field and after everyone went to bed I snuck out to see it. There was a full moon and I wanted to photograph the stone in moonlight. Baskin was sitting on it like a Buddha. I snuck back inside and left him with it.

* * *

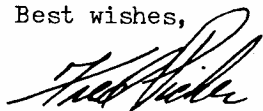
The paper...Zone VI Brilliant came, went, and it's possible there may be no more. The European manufacturer believes he can sell all he wants in Europe at a very high price and has shown no interest in continuing shipments to us, at any

price. Naturally, this was very distressing to us and to lots of photographers who had hopes for a beautiful paper at a reasonable price. No one got much because we spread it out the best we could and Bern got writer's cramp writing refund checks. There was unanimous opinion that the quality was marvelous which makes the loss of it that much more difficult to take. We'll keep trying and will let you know of developments. In the meantime we have Ilfobrom and it's the best available.

Three of our workshop staff members have been honored recently. Wes Disney's recent work was featured in the new acquisition section at the Museum of Modern Art. Dr. Martin Tarter, Professor of Humanities at Virginia Commonwealth University, was selected for a national award for excellence in University teaching by a panel of outstanding scholars. Susan Barron hung an exquisite show at New York City's prestigious Light Gallery and Callaway Editions, the most exciting new publisher of fine photography to appear in many a year, will publish a limited edition of her original prints.

There is a magazine that you might like to know about. It is called "Combinations" and it is a journal of photography; a non-profit educational publication that I'm sure you would enjoy and whose support is merited. Mary Ann Lynch, the publisher, is dedicated to the presentation of interesting new work and "Combinations" will give serious consideration to the publication of all work of merit without the usual political overtones. Send \$12.00 (or more) to "Combinations" C/O Mary Ann Lynch, 6 Middle Grove Rd., Greenfield Center, N.Y. 12833. That will get you four consecutive issues. If you would care to join me and Ted Orland (former assistant to Ansel Adams) on the masthead, send \$50.00 and become a sustaining member. You will be doing a good thing for yourself and for photography.

Best wishes,



ZONE VI Newsletter

NEWSLETTER #25

July 1980

"For my part, I travel not to go anywhere,
but to go. I travel for travel's sake.
The great affair is to move."

Travels With A Donkey
Robert Louis Stevenson

Not long ago I received a letter from Charles Graff who had read one or two of my books and is a customer of Zone VI. Charles is a Texan now living in Quito, Ecuador, and his letter contained a glowing account of the beauties of Ecuador and a kind offer to serve as guide, driver, and interpreter. I've often wished I could visit the Andes and Charles' offer came at a perfect time so after a phone call, which took an amazingly fast ten seconds to go through and cost an amazingly little \$6.00, we firmed up a date to meet. I'll leave May 5 and perhaps finish this Newsletter with an account of how it worked out. It might be a good idea to list some of the things that I will take and describe some procedures that have worked out well on trips to remote places.

I'll take the Zone VI two lens camera outfit exactly as it is shown in the catalog, with one exception. Six film holders will only do the job if you are working in a place where you can load often. Even then, daily loading is a nuisance. I have 35 holders and that usually works out to be at least a three day supply. This will vary with the type of work I am doing. A portrait may require as many as five exposures. (If I can't get anything in five, I'm satisfied I can't get anything in 25.) You can use 4 or 5 exposures on a single landscape in changing storm light or changing cloud formations but, on average, I find that when working hard I use between five and ten holders - ten to twenty exposures - a day. How many exposures for a trip? For the "Iceland Portfolio" I

spent two months in Iceland in order to make the sixteen photographs that made up the portfolio. I used two boxes - 200 sheets - of 4x5. All exposures were duplicated and, in changing light, sometimes three or four exposures were made. So there were about 60 different pictures to choose from. That doesn't seem like a lot of work but it was because the nature of portfolios requires that every picture be dramatic. On Easter Island I used nearly twice as much film in half as much time for "Rapa Nui" because there were many pictures required to illustrate the text. Pictures of that nature come quite easily compared with the more selective images required for a portfolio. Estimate the film you're likely to need, double it, and then round it off upwards. Imagine missing even one fine photograph because you didn't bring that last box of film! Never assume you can buy film on any trip.

I'll take 4x5 Tri-X sheet film for the main camera; I'll take 400 sheets of film and 35 holders. That's figuring 200 exposures or 12 a day as the probable usage and doubling that. I'll take another camera, an old M-2 Leica that is constructed like an army tank. It is free of meters and batteries and mirrors. You just set the aperture and shutter speed, then focus and push the button. It has a good 35mm lens and I will take six rolls of color slide film. These pictures will be for a slide show that my friends might enjoy and for commercial use. Suppose something breaks? The only thing that might, barring a bad accident, is the ground glass on the field camera. I've never broken one but they seem vulnerable and they might be hard to replace in a foreign land. I'll take an extra glass which is packed in foam rubber and taped between two layers of heavy cardboard. If the bellows should be cut - that has never happened either - I'll have black photo tape to patch it.

I'll take six cable releases for the two lenses. The moronic design of these devices assures that no matter what you do they will come undone and get lost. I put them in with Loc-tite which is stuff that keeps screws and nuts together and that helps a bit. One

cable will be a long one; 24". A 6" or 8" release is perfect for most work but the long one is excellent for portraits. I hold the business end out of sight so that the subject can't see me take the picture. (If they see your finger moving toward the trigger, they flinch.) I'll take a Soligor 1 degree meter and an old Weston V for a back up. For filters, a K-1 and a #12 Gel will be sufficient. The K-1 is the mildest of filters. It's a pale yellow requiring only $\frac{1}{2}$ stop of extra exposure. The #12 is a stronger yellow requiring a full stop, but both filters are mild in effect compared with a G (orange) or an A (red). It took me years to grasp the fact that filters are usually counterproductive and I almost never use the stronger filters any more. They create an artificial harshness by disproportionately reducing the negative densities in the shadow areas of the subject and that is in direct opposition to what I am trying to do.

It is a fact that the film can only reproduce detail over a fraction of the light range that the eye can. Why reduce that range even further? Filters, except blue, also darken skies, and I dislike unnaturally dark skies. I can't understand why everyone wants to take the light out of the sky, though I've been guilty of doing that for a superficial dramatic effect in commercial architectural work. (Many architects think a pitch black sky is nice.) Some of the most beautiful landscapes ever made have near white skies. They were made when film was orthochromatic (blue sensitive) and the blue sky photographed as white.

That's it; two cameras, three lenses, two filters, magnifying eye glasses for focusing on the ground glass, tripod, focusing cloth and, except for the tripod, it all fits into our shoulder bag.

Handling Sheet Film on a Trip

I use two insulated zip-top bags to carry the film. They are picnic gear from a hardware store. They are about 16" long, 6" wide, and 10" deep. A film holder is $\frac{1}{2}$ " thick so you can carry about 25 holders per bag

without crowding. Assuming 35 holders, that leaves extra space and in that space I put the fresh film boxes and some empty film boxes for unloading exposed film. The empty boxes are marked "Plus," "Normal," and "Minus" and the films are unloaded into the box that will be developed properly for the conditions under which they were exposed. One empty box for each development category is plenty because after a while you will be creating more empties as you continue to replenish your holders.

First, number all the holders in the little white spaces provided. The first holder is "1" on one side and "2" on the other, the second holder is "3" and "4," etc. I mark holders with an indelible black felt-tipped pen. You make an exposure on side "21" for example. You reinsert the slide black side out. That indicates exposed film. If you are not positive whether that exposure should be a plus development, you write in your exposure record "#21, normal," then you turn the film holder around and expose sheet 22 and write "#22, Plus." Why aren't you positive? For the simple reason that no one can visualize exactly what effect will be obtained when a scene containing depth and color is reduced to a two dimensional print perhaps 1/1000 the size of the scene photographed.

When in doubt, be nice to the person in the dark-room; it's you. Give yourself a choice of negatives. Some subjects are never a problem. My experience shows that open shade portraits are always "normal" if there is any white in the scene, always Plus 1 if there isn't. I don't attempt any more than a plus or minus one because modern films don't handle greater development ranges well. If I need one grade more or less contrast to achieve the effect I want, I just go to the adjacent paper grade. Only when I need two grades of contrast change will I change negative development time. A plus one negative printed on a #3 paper will equal a plus 2 and printed on a #4 will provide a plus 3. Ninety percent of my negatives seem to require normal development. I only help along those that I know will require a big step up or down in contrast.

If you don't have an exposure record, make three columns on a sheet of paper: "N," "N+1," and "N-1," then list the numbers of the films under each heading as you take the picture. If you think you will remember which holder gets what development, even for a moment, you are about to get into trouble. If it's not a hurry up picture, I make notations before I make the exposure.

To unload the holders on a trip, the best situation would be a windowless bathroom and a coffee table. Make sure it's completely dark; use focusing cloth, tape, push-pins, towels. Check your list and pull out the holders that require "Plus" and the empty "Plus" box. Do the same with the Normal and Minus films. (I don't remember when I last did a minus.)

After you have all the films unloaded into their proper boxes, pull the slides out of the holders and brush out the holders and the slides. I use a $2\frac{1}{2}$ " wide paint brush while traveling, a vacuum cleaner when at home. Push the slides back in half way with the silver sides out. Don't pull all the slides out and stack them, as advised in some publications, because the slides will work more smoothly if they are always returned to the same holder. Turn off the light and load the holders. This procedure is covered in "Zone VI Workshop" but subsequent experience has shown that one point requires emphasis: If your right index finger is on the film notches, you can't possibly insert the film improperly.

When you get home you will have all your exposed film in boxes which are marked with development instructions.

Charles met me at the Quito airport with his wife Barbara and we went out to dinner at a beautiful restaurant in the hills overlooking the city. Quito was lit up like a Christmas tree and stretched for miles through the valley. Quito is right on the equator so it has no seasons. It is at 9,000 feet altitude and the temperature varies year round from about 65 degrees

at night to 75 during the day. Once in a while it rains a sprinkle, but there is no rainy season. The sun comes up at 6:00 a.m. and sets at 6:00 p.m., 365 days a year. The population of Quito is about 800,000, about half (I think) are Indian and the other half are Latin. The language is Spanish and various Indian dialects. The people are gracious and friendly; the government unstable but civilized. It's a fine place to visit or, according to the Graffs, live.

On the following day we toured the city in his 4-wheel drive and made a few pictures. The place that most impressed me photographically was the city graveyard. It is largely made up of seemingly endless white concrete walls up to 20 feet high in which the dead are placed. They are stacked about eight or ten high as in pigeon holes and then the individual tombs are faced with a startling variety of decoration, usually in a glass frame. The name of the deceased is shown and the box may also contain a photograph, some flowers, trinkets, religious devices, etc. I had seen this sort of above ground graveyard in photographs of New Orleans by Clarence John Laughlin. There was so much fantastic subject matter that it became confusing. I was also a bit numbed by the altitude. It takes a couple of days to get used to it.

After a few days in Quito we left for a trip south to more primitive areas at higher elevations. We headquartered in a decent hotel in Riobamba, about 100 miles from Quito. The Andes are magnificent and I was surprised to see how fully the steep slopes are utilized for grazing and crops. It's hoe labor; the farmers are desperately poor but even if they had a tractor it would fall off those slopes. Occasionally you see a burro or a team of oxen but, for the most part, the people do all the heavy work and even the littlest children carry enormous loads.

We did a lot of exploring up dirt roads -- at one point Charles' altimeter showed 15,000 feet. One Indian hamlet we visited was so remote that the way people reacted to us made me think they had only seen an oc-

casional outsider. I made a portrait of a beautiful older man outside the church. He thanked me so profusely that I am quite sure he had never been photographed before. Charles was a fine companion and I enjoyed meeting him. I hope we'll meet again.

My next stop was the Yucatan and I went to Merida. HOT. I rented a car and drove to Chichen-Itza one day and Uxmal the next and then spent several more days meandering about the country side. The pyramids are magnificent. One problem with photographing the pyramids is that the rules say you can't take a tripod into the grounds. "Impossible!" The guard, after a half hour of gesticulating, moaning with eyes to the sky and wringing of hands, discovered it's "possible." What makes it possible is \$20. Another problem is the tourists who climb the pyramids but I was determined to get pictures, especially after the tripod experience and the car rental experience (I'll spare you that one), so I pretended to be an official, ordered all the people off, got away with it, and got the pictures.

Some great pictures that I didn't get were those I saw from a cab window between a downtown hotel and the Mexico City airport. Along that street were hundreds of wonderful store fronts with fascinating murals, signs, and objects in the windows and people out front chatting while waiting for customers. The bars were the best of all. Paintings of bullfights, pretty ladies dancing the fandango, and baseball players sometimes appeared in the same painting. Did they learn that marvelous chaos from Diego Rivera or did he learn it from them?

All the negatives from the trip are developed and proofed and they all look fine. There were 90 negatives. None was made with any filtration and only one was a plus-1 development. No minuses. The plus was a detail of a carving of a warrior and serpents at the Pelota court in Chichen-Itza. It was in shade and the grey stone showed so little tonal definition of the carved areas that, even with the plus development, at least a #3 paper will be required to delineate the forms.

I enjoyed the adventure of the trip; seeing new places and different ways of life is always exciting to me and I am already looking forward to the next trip. The Brittany Coast and the Hebrides, after the workshops, would be nice.

*

"The voices of Roger Williams, Ethan Allen, Samuel Adams, and James Otis; of Garrison, Wendell Phillips, and John Brown; of Thoreau, Emerson, and many others, true spokesmen of America in their time, echoed in the air of these states. It was this concept of New England that led me to try to find in present-day New England images of nature and architecture and faces of people that were either part of or related in feeling to its great tradition."

In those words, Paul Strand introduced "Time in New England." Published in 1950 in an edition of less than 10,000, "Time in New England" rapidly went out of print and became a collectors' item nearly impossible to obtain. I found a copy in poor condition ten years ago and happily paid \$150.00 for it. I believed then and I believe now that it is a landmark book, the forerunner of what this extraordinary photographer would eventually accomplish and the model of what a photographic book can be. The photographs are classic explorations of the spirit of New England and its people, its fields and rocky pastures, the early structures, the sailing vessels and the sea and its edges. They are accompanied by an outstanding text; the writings of those who shaped the region's destiny and of those who illuminated it. Nancy Newhall's selection of letters, poems, memoirs, tall tales, and sermons are perfectly fitted to the pictures. They cover American history from Jonathan Edwards to Robert Frost.

After all these years, "Time in New England" will be available again and it is better than ever. Frankly, though the images in the original were superb, the reproductions were not so hot. The reproductions in the

new edition, however, are great. The book will be in stock soon. If you have never seen it, I envy you; it will be like hearing "Eine Kleine Nachtmusik" for the first time.

*

"While we give it credit only for depicting the merest surface, the photograph actually brings out the secret character with a truth that no painter could venture upon, even if he could detect it."

Nathaniel Hawthorne
The House of the Seven Gables

Opening night at our workshops is partly taken up with a gallery show by the staff. There are seven of us and there is space enough for about 15 prints per staffer, a total of 105 prints, which is a large show. We show new work because we are all excited to see what the others have done in the past year. The staff members spend about an hour looking at the show and will come back the next day for another hour or so, but 75% of the students are finished looking within ten minutes, some can zip through in five, a few (invariably those who later prove to be the best photographers) stay up to a half hour. What are the staff members and the good photographers seeing that the others miss?

Most of the students respond only to the most easily accessible characteristics of the photographs; subject matter that is familiar and technical quality that is brilliant. But the more visually sophisticated students and the staff members care little for routine subject matter and they take technical excellence -- the easiest part of photography -- for granted. For them, admirable is not enough; they seek the wonderful. All the pictures in the staff show are admirable. (It is safe to say that all of the pictures that a gifted photographer makes are at least admirable. He could no more slaughter a scene compositionally or ruin a negative technically than a gifted chef could boil a steak.)

Admirable pictures are difficult to criticize be-

cause there is nothing specifically wrong with them.

There is not too much trouble determining what elements make a picture admirable. Those might include such simple things as a strong and purposeful composition and good tonal balance from corner to corner. There should be a dynamic balance of the objects that make up a picture so that some are of greater interest than others. Also, I believe that the two unique attributes of the camera; the ability to resolve fine detail and the ability to produce an infinite range of tonal gradation, should be utilized. Out of focus areas or fuzzy images or the poor seeing that produces prints of unbalanced gradation are distressing. In an effort to clarify my thinking I tried to write a definition of an admirable photograph:

A photograph should contain no unnecessary elements for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts. This requires not that the photographer make all his photographs simple, avoiding rich detail and treating his subjects only in outline, but that every element contribute to the revelation of the subject and indicate the photographer's involvement with it.

At workshops our staff members have no trouble at all separating a student's work into two piles; those pictures demonstrating the photographer's involvement and those he took for effect because he thought someone else might like them.

Wonderful pictures cannot be described. You look at one and it strikes some cord and you say 'oh, yes, yes, that is true' and you never forget it. The picture might be deceptively simple or intricate and complex. Wonderful pictures have no rules, no boundaries, are very rare and are not accessible to every viewer. Picasso lamented, "When I was unknown very few really understood my work. Now I am famous and very few really understand my work."

There aren't many pictures that fit the 'wonderful' category and those who have made a few admit that they don't know exactly why or how it happens. Once you've made one it's what you live for but all you can do in an effort to repeat the experience is the best you can. You keep working, keep studying, keep reading, keep listening to music and exploring and looking at the world as clearly and sensitively and deeply as you can and, if you want it enough and live long enough, maybe one fine day all of that comes together and explodes again in another wonderful photograph.

Many wonderful pictures are the result of dedicated search rather than fortuitous circumstance. They are the distillation of a series in which a photographer explores a single subject in depth. Examples here include photographs of Paris by Atget, Caponigro's "Sunflowers" and the Stonehenge series, and a dozen series by Strand, starting with the machine tools, through all the books, the Mexican Portfolio, and ending with the garden pictures of "On My Doorstep." And, Weston's shells and vegetables, Callahan's beach series, Lilo Raymond's diaphanous interiors, and on and on.

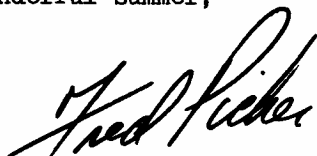
These pictures, the result of a prolonged and extensive effort, are usually more exciting to me than the pictures that happened when fate stepped in and lent the photographer a hand. The wonderful pictures in a series are the result of the photographer's drive to seek out and understand the raw essence of the thing before his lens. In his attempts at the impossible, he occasionally achieves the wonderful.

"I was asked the question who were the five best contemporary writers and how did I rate them. And I said Wolfe, Hemingway, Dos Passos, Caldwell and myself. I rated Wolfe first, myself second; I put Hemingway last. I said we were all failures. All of us had failed to match the dream of perfection and I rated the authors on the basis of their splendid failure to do the impossible. I believed Wolfe tried to do the greatest of the impos-

ible, that he tried to reduce all human experience to literature. And I thought after Wolfe I tried the most. I rated Hemingway last because he stayed within what he knew. He did it fine, but he didn't try for the impossible...I was talking only about the magnificence of the failure, the attempt to do the impossible within human experience."

William Faulkner, 1955

With best wishes for a wonderful summer,

A handwritten signature in black ink, reading "Fred Fisher". The signature is written in a cursive, flowing style with a large, prominent "F" and "S".

ZONE VI Newsletter

NEWSLETTER #26
September 1980

In the last Newsletter there was an attempt to investigate the difference between those pictures that I regard as "admirable" and those that I think of, without attempting to describe them except in terms of their affect on sensitive viewers, as "wonderful." I was surprised at the amount of interest and controversy this subject stimulated, both by mail and during the summer workshops. Many interesting, and a few pretty hot, dinner table discussions were generated.

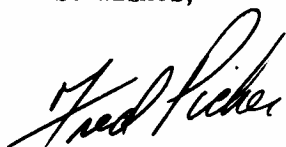
The wonderful pictures grow out of the process the photographer goes through and that process -- that creative process fascinates me. How does the artist do it? In what state of mind is he? Great art has been made by the wealthy, by the starving, by those who died in obscurity, and by those whose deaths were mourned by thousands. What are the rules? Are there any? What characteristics, if any, do those who produce wonderful work share in common? What are their work habits? Are they neat or sloppy, fast or slow, steady or intermittent workers? Do they produce in sorrow? In joy? In anger? Do they work best early in the day or late? Does failure act as a spur or a discouragement? Does success frighten them? Does creative achievement result from a flash of recognition or is it ground out step by painful step? Are all of the great ones full-time workers in their media or is it possible (beneficial?) to be involved with other interests and in other pursuits?

Is working in solitude more stimulating that working in company? I can only work alone but I know that members of a string quartet encourage each other to greater heights than the individual members can reach

alone. Do solitary people choose media that are best approached in solitude?

If this Newsletter were a symphony, it would soon be nick-named "The Question." I have a lot of questions and wish I knew as much about these things as about exposing film or making prints. But people with more expert and specialized knowledge than mine are also fascinated by the creative act and how it works. When Lil Farber was a dean at Sarah Lawrence College she sent me a reprint of a speech given at the Bank Street College of Education by Charlotte Lackner Doyle, a member of the Sarah Lawrence psychology faculty. I have re-read it with enjoyment a dozen times and it has never failed to fascinate and inform. Sarah Lawrence College and Mrs. Doyle have kindly given permission to reprint her wonderful talk and we are delighted to be able to bring it to you. I am sure that you will enjoy it.

Best wishes,

A handwritten signature in cursive script, reading "Fred Pickel". The signature is written in dark ink and is positioned to the right of the typed name "Fred Pickel".

The following is reprinted from Volume 3, Number 1 of
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The Creative Process: A Study In Paradox

Charlotte Lackner Doyle

A funny thing happened to me on the way to writing this essay. It began when Mrs. Winsor* called and asked me to write a speech on creativity. I sat down to write what could be said about the creative process. But whatever generalization I wrote down, the opposite also seemed true. Let me show you what I mean. First I wrote, "the creative process requires freedom and spontaneity." But then the aphorism quoted by Ezra Pound rang in my ears, "Any damn fool can be spontaneous." And though I didn't quite agree with Mr. Pound, I immediately straightened up in my chair, leaned forward resolutely and wrote, "the creative process demands discipline, concentration, a commitment to work." I thought of Freud and wrote, "the creative process taps the primitive and the emotional." And then I thought of Shakespeare and Rembrandt and wrote, "the creative process requires insight, intelligence and maturity." I thought of the psychologist, Guilford, and wrote, "the creative process involves fantasy, inventiveness and ability for thought to diverge from what is." But then I remembered my own interviews with artists and wrote, "the creative process demands honesty and a commitment to truth." Then statements began to crowd in on me: The creative process is self-expression; the creative process cannot take place unless the creator forgets about self. The creative process is a joy; the creative process is fraught with fear, terror and frustration. The creative process is its own reward; the creative process needs support and encouragement. As contradictory statements floated around in my head, the title for this talk came to me: The Creative Process: A Study in Paradox. (It's an old trick psychologists have learned: if you don't understand something, name it. Now you have a phenomenon to study, and everyone feels better.)

Having named my problem, I looked around for resources to help me get insight into it. For several years, I have been teaching a course called "The Psychology of Creativity" in which my students and I look to see what the great thinkers in psychology have to say about the creative process. First, we look at Freud and Jung. In their writings about the creative person, these great clinicians dealt primarily with fine artists: writers, painters, sculptors. They saw artists as having a unique and special talent: delving into the depths of their personalities and giving coherent form to ideas and impulses

*This essay is based on the keynote address delivered to the Lucy Sprague Mitchell Memorial Conference: *The Creative Experience: Aspects and Interplay*, held at the Bank Street College of Education, May 19, 1974. Charlotte

that remain buried and incoherent in everyone else. For Freud, it is the repressed wishes of infancy that the artist has the power to transform so that all of us can get some release. "The writer," said Freud, "is a person with a certain flexibility of repression and the courage to let his unconscious speak." Why has the Mona Lisa smile tantalized people for centuries? Because it is the tantalizing smile that every infant sees, that of the tender, seductive, yet unavailable mother whose love each baby yearns for but ultimately cannot fully consummate. Why do plays like "Oedipus Rex" and "Hamlet" continue to move us? Because they tell of the death of a father and the infidelity of a mother, which Freud felt was a disguised retelling of every boy's early wishes and fears. The artist tells these stories in a way that is disguised so that neither he nor his audience knows the true source. The disguise is like the primitive language of our dreams. Using this hidden code, we can be deeply moved and not know why.

Jung, too, sees the artist as descending into the depths of personality but for him the great artist is not simply dealing with the impulses and ideas of the personal unconscious, but with the universal images for living with which Jung believed everyone was born. There is a collective unconscious peopled by characters and themes which have held significance in myth, ritual and religion throughout the ages. This collective unconscious is the source and the significance of creative work. For example, the story of death, a descent into the underworld, a resurrection, and a rebirth is a universal theme that symbolizes for each of us the many deaths, hells and rebirths we encounter in life. All of us are born with this theme inarticulately buried inside us. For Jung, the artist makes articulate these collective themes which can serve as a guide to our journey through life. In providing a tangible form for them, the artist fulfills a deep and little understood human necessity.

Abraham Maslow sees the creative process quite differently: not as the making of a work of art but as a way of approaching life. It is the approach to life of every healthy child. By healthy, Maslow means that the child does not want for any of his basic needs: the needs for food, warmth, safety, and love. Infantile psychic conflict, repressed anxiety, is not inevitable to Maslow as it is to Freud. A child, unfettered by repressed anxiety and unconstrained by fears of cultural demand, will be free, spontaneous, curious, learning by his own discoveries, constantly growing and changing. Such creativity need have no product. The creativity Maslow writes of may be expressed in the way food is eaten, in the way friends are made, in the decoration of a house, or in a walk in the park. He writes that many artists have a special talent for art but they are unhappy and compulsive, driven by infantile need — and so in one sense — not creative. Psychologists and educators interested in creativity, says Maslow, should not focus on talented neurotics but on the conditions for a life of healthy growth.

Maslow thinks of the creative process in terms of a total life; some psychologists think of it in terms of a moment, a kernel act. The essence of the creative process according to this view is the generation of new and original ideas. The same ability, the same basic psychic operations, are involved whether the task is to generate ideas for a new style in painting, a new approach to cancer research, a new way to make soup, or a new wrinkle in income tax returns. The ability to produce many diverse ideas is the core.

This kind of approach has been taken by some experimental psychologists who, in order to do their research, need a concrete act which they can observe. The most active have been researchers who think about, develop and validate psychological tests. Psychologists like Guilford, Getzels and Jackson, and Wallach and Kogan were dissatisfied with the standard intelligence test as the sole indicator of a child's potential. Intelligence tests ask questions to which there are correct answers. They do not capture the ability to come up with a new idea, to be original, to create. So they designed new kinds of questions, divergent thinking questions, questions for which there are no single correct answers, questions which make observable a flow of thought rather than the ability to solve a task with a correct answer. Instead of asking as an intelligence test does: how are a fly and a tree alike, scoring any answer mentioning life as correct; they designed questions like: what are the ways that a mouse and a lion are alike? Being an animal is one answer; having fleas, scaring the timid, being movie stars in some form or other are others. Instead of asking children to copy a drawing, a child might be asked — what are the different things this drawing could be? "How many uses can you think of for a brick?" is one of the most famous items. These divergent thinking tasks, some people call them creativity tests, look for evidence of an ability to produce many different and original ideas. "Divergent thinking" is the ability for thought to flow from one idea to the other — the more far out, the zanier, the better. The ability to come up with wide-ranging associations is seen as the primary condition of the creative process and the essential act of creation. Once the testers defined the creative act in this way, in this observable way, psychologists from another tradition became interested in the creative process: the behaviorists, behavior modifiers, those who believe any behavior can be shaped by selective reward. The behaviorists jumped in and said: if the creative process consists of making different and divergent answers to a problem, then the way to make people more creative is to put people in situations where they do come up with a variety of answers and then reward them for it. So behaviorists have rewarded college students for unusual associations to words, porpoises for creating unusual sequences of movement and children for building many different kinds of structures with blocks — hoping to advance the creative process.

As my students and I read through each of these theories¹, we are victims of something like the medical student syndrome. It happens to me every year. Each account, as we read it, seems right. As we read Freud, the idea of every artist reaching into and expressing in disguised form his own early infantile conflicts, which constitute everyman's early history, seems persuasive. We read Jung and are moved by the idea that at the deepest levels of our psyche are the primitive forms of the collective unconscious. We read Maslow and delight in the idea that life itself can be a creative process. We applaud Guilford and those who followed his lead for broadening the view of what talent is, for augmenting the intelligence test with items for which there is no one right answer, but which call for flexible and original thought. And we look on in wonder at the behaviorists whose earlier work emphasized behavior as a bundle of habits, march in and try to make divergent thinking itself a habit. Psychological theory is a rich resource, but unless you are a true believer, it alone doesn't resolve paradox; it compounds it.

There is another resource: the reports and insights of creative people themselves. My students and I also read interviews, letters, prefaces, and autobiographies in which artists write about how they work. We also interviewed three people who are on our Sarah Lawrence faculty: Jane Cooper, a poet whose first book of poems, *The Weather of Six Mornings*, won the Lamont Prize and whose second book, *Maps and Windows*, was published this year; Grace Paley who has written two fine books of short stories — *The Little Disturbances of Man* and, her recent book, *Enormous Changes at the Last Minute*, and Joel Spiegelman, an exciting modern composer who is internationally recognized.

The interviews, the personal documents and the theories were my resources for dealing with paradox. So I listened again to the tapes, reread the autobiographical statements, and reviewed the theories; looking for, hoping for some thread to guide me out of what was beginning to appear like a hopeless morass. I'd write words on my pad like time, medium, discovery — to try to capture the similarities and differences in the theories and in the personal statements. Then, one day, perhaps out of desperation, perhaps out of boredom, I decided to take that first word — *time* — seriously and to see where it lead me.

I think I first wrote down the word *time*, because this was a dimension on which theorists differ: Guilford focuses on a task that takes minutes, how many uses can you think of for a brick. Freud and Jung write of artists and the work they make — the time span is more like days or months. Maslow speaks of the creative process in terms of a lifetime. When we spoke to artists, we became increasingly aware that the creations of works of art are episodes in a larger life that has to cope with all the other tasks and problems of life, a larger life that has been developing and changing and growing

So let us see what happens if we look at the creative process with the perspective of time. Let's focus on the creative episode which results in a product. Maslow may be saying something important when he speaks of a creative life without creative products, an open loving spontaneous life, but I would like to take a close look at the *creative episode in art*, that segment of time in a life when a work of art is made. Whether the kinds of processes that characterize the creative episode take place in contexts outside of the making of a work of art is a separate question.

We can identify the boundary that marks the beginning of the creative episode. It begins with the intimation that the process has begun, with a hunch that there is a seed of thought that can be developed. This can happen in different ways. Sometimes, the germ that starts the process is very clear. Henry James describes such a beginning in his preface to *The Spoils of Poynton*. He speaks of eating Christmas dinner with some friends. A woman told of an incident about a mother and a son who cared about each other and who both were considered wonderful, exemplary people. But mother and son were suddenly "at daggers" over the disposition of the dead father's property. Here is how James described what happened as soon as he heard the story:

I instantly became aware . . . of the prick of inoculation; the whole of the virus, being infused by that single touch . . . I 'took' in fine 'on the spot,' to the rich bare little fact of the two related figures, embroiled perhaps all so sordidly, and for reasons of which I could most probably have given no decent account. Had I been asked why they were . . . 'interesting,' I fear I could have said nothing more to the point . . . than 'Well, you'll see.' By which of course I should have meant, 'Well, I shall see' . . . That points, I think, to a large part of the very source of interest for the artist . . . that he alone has the *secret* of a particular case, he alone can measure the truth of the direction to be taken

Katherine Anne Porter speaks in one case of an idea starting inarticulately — simply the intuition that something is there to work on.

Sometimes an idea starts completely inarticulately. You're not thinking in images or words or — well, it's exactly like a dark cloud moving in your head. You keep wondering what will come out of this and then it will dissolve itself into a set of — well, not images exactly, but really thoughts. You begin to think directly in words. Abstractly. Then the words transform themselves into images. By the time I write the story, my people are up and alive and walking around and taking things in their own hands.

The important thing to notice is that the creative process begins with a sense of direction, with the hunch that there is something to go after. Something pulls at the mind. What pulls at the mind may come from an experience, from the play of divergent thinking, or from hard directed thinking about a problem that interests. But something tugs, something beckons, some yet inarticulate goal beckons. There is no creative process without a direction. Spontaneity without a direction may be delightful and wonderful but it, without a direction emerging from it, does not lead to creative work.

The creative episode begins with a sense of direction. How do you go after something when often, you don't know what it is you are going after? Part of the answer, I think, is that the artist *thinks through* his medium. The painter thinks in form and color; the poet thinks in images and words; the playwright thinks in characters and dialogue and events as they appear on stage. For example, an interviewer asked Faulkner how *The Sound and the Fury* began and grew:

It began with a mental picture . . . The picture was of the muddy seat of a little girl's drawers in a pear tree, where she could see through a window where her grandmother's funeral was taking place and report what was happening to her brothers on the ground below. By the time I explained who they were and what they were doing and how her pants got muddy, I realized it would be impossible to get all of it into a short story, and that it would have to be a book. And then I realized the symbolism of the soiled pants and the image was replaced by one of the fatherless and motherless girl climbing down the rainpipe to escape from the only home she had, where she had never been offered love or affection or understanding.

Faulkner began *The Sound and the Fury* with an image and he developed the novel by developing characters and events from the image. He thought directly in the fictional medium.

The artist, in fact, every thinker, needs such a medium, a vehicle for organizing and thinking about experience. And although some psychologists associate thought with logical operations and abstract verbal generalization, the artist, thinking in a medium, thinks differently.² He thinks forms, and people talking and images and rhythms. When the artist thinks in this way, certain so-called logical distinctions disappear — for example, the distinction between intellect and emotion. In life we simultaneously grasp an experience and feel it emotionally; we see someone blocking us and we feel angry; we grasp that someone is helping us and we feel grateful; we notice the sudden grayness of the day and feel the melancholy.³ In a medium, an artist can simultaneously communicate event and feeling. This is one example, but I suspect that by thinking directly in a given medium, the artist can give form to all sorts of complex-

own special properties which make it easier to think in certain ways through it. To think *time* is more difficult in the spatial arts than in writing or music, for example.

In order to think through a medium, a person needs skill. I remember an incident Herbert Kohl wrote about. He was describing his work with pupils considered difficult to reach and his method was to get them to write. One little girl raised her hand and said something like, "I would like to write about my father if there is a word for him. But if there is no word for him, I don't want to."

Learning a skill is again a process that takes time, a developmental process, and for artists it may be a lifelong process. In interviews, artists frequently speak of their struggles with the craft. For example, at one point Jane Cooper told us of "studying how to make time happen in the present."

Studying the medium, learning the craft is a part of the life of the creative artist which prepares him for the creative episode, but a conscious attempt to do tricky things with the medium to express an idea is probably doomed. Because the artist does not dress a thought which is in his head in some other form and put it into the medium; he thinks through it. Grace Paley said, "For me to understand something, I have to put it in fictional terms." The ideas are thought in the flesh of character or event or shape or image or rhythm. In art, ideas are in flesh.

Thinking in the medium, clarifying and developing that original germ does not occur in an instant. Again, it is a process that takes time.⁴ Partly this is because thinking in a medium is trying things out. An impulse is pulled out of the ever changing flow which is our stream of thought and made a thing in the world which is not ephemeral. It stands to face the artist. He can look at it or hear it and then say to himself, "That's it, that's what I was going after," or "That's not it — it has to be something more like this."

Van Gogh wrote to a friend:

When I have a model who is quiet and steady and with whom I am acquainted, then I draw repeatedly until there is one drawing that is different from the rest, which does not look like an ordinary study, but more typical and with feeling. All the same it was made under circumstances similar to those of the others, yet the latter have less feeling and life in them As to *The Little Winter Gardens*, for example, you said yourself they had so much feeling; all right, but that was not accidental — I drew them several times and there was no feeling in them. Then afterwards — after I had done the ones that were so stiff — came the others. How does it happen that I can express something of that kind? Because the thing has already taken form in my mind before I start on it. The first attempts are

know that if you see something worthwhile in what I am doing, it is not by accident but because of real intention and purpose.

For Van Gogh, there was an intention, a direction, one he could not put into words and could not put on canvas at first, but by working in the medium out in the world of paint and canvas, the intention finally took flesh.

Grace Paley described writing her stories and she said, "I talk the people. I talk some of the people sixty times."

Hemingway wrote the last page of *A Farewell to Arms* 39 times. Why, an interviewer asked, what was the problem. "Getting the words right," was the answer.

The medium is kind of a reality principle. It shows us when we don't know what we think. Have you ever thought you understood something and then when you try to put it into words, the words fail. You discover that you don't really understand; in fact you can locate the points where the words and the thoughts, I should say the thoughts-in-the-words, are hazy? Now you can go back and clarify or investigate a problem you didn't know you had.

A friend of mine, a composer, told me he dreamt the most marvellous melodies, but by morning they were forgotten. He resolved to keep music paper on his nighttable and write down the melody as soon as he awoke. That night, once again, he had a dream of a marvellous melody. He awoke and immediately wrote it down and then went back to sleep. The next morning, he looked at what he had written. My friend shook his head as he told the story. "Charlotte," he said, "it was terrible, in the light of day it was terrible."

Students sometimes tell me, I have an idea, but I can't say it. And I answer, you don't know what the idea is until you say it — till you put it out in the world in some medium.

The medium puts the clouds in our heads out in the world — makes them a crystallized thing, perhaps awkward and foggy but out in the world where the creator can look at it, build on it, think about it in a new way. Now the creative process becomes an encounter between the creator and that which is being created.

So the creative process begins. It starts with a hunch and a sense of direction and develops and grows through thinking with the medium. If you are lucky, and Katherine Anne Porter, something forms and forms and there is a story. But if you are Joel Spiegelman — here's how he tells it:

You never know when you start composing and when you think you are, you're not. You try, and it doesn't go. You go away for a while and AHA, the problem, the notes you've been working with a long time — they begin to

Or Grace Paley. She told us that she writes the first paragraph of her stories out of pure language:

It was the language that started me, made me think . . . I haven't the vaguest idea what the story is, what page three is . . . Then maybe in a couple months I write the next three pages and then I'm really stuck . . . Suddenly I get this thing, these three to five pages which I really wrote before and I say 'My God' and that's what the story is about because that's what my head has been forming.

These descriptions are reminiscent of a description of the art of thought put forward by Graham Wallas fifty years ago. He recognized thought as taking place in time and distinguished four stages: preparation, incubation, illumination, and verification. Preparation involves a thorough investigation of the problem. (He assumes that for thinking, the problem first has to be clear.) Incubation is a turning away from the problem consciously and hopefully — an illumination, a discovery emerges from what Grace Paley calls the compost heap of the mind. And then there is the workmanlike task of seeing whether the solution is in fact a solution (verification). (It's a dangerous thing to teach students Graham Wallas. A conversation that has taken place more than once in my office goes like this. "How's your paper coming?" "I'm still incubating." But never daunted I then ask, "Have you thoroughly prepared?" and if the answer is yes, my next question is, "Do you have a sense that you have a direction even if you don't yet know exactly what it is — because if you don't have this, the process hasn't really started, and you should play with the material until it happens.") I don't know what goes on during incubation, but I suspect it is that initial sense of direction, if it is strong enough, that remains active, which is ready to rise again into consciousness if there is a hint that the mind can find a way to pursue it.⁵ Joel Spiegelman, at one point, spoke of finding one key which permitted him a long extension, and then he ran dry. "Then," he said, "I have to get far, far away . . . and then the magic of an idea . . . may come to you in the shape of a building or a skyline, all kinds of extra-musical sources, but you draw some kind of relation to the musical shape."

In this description, an important thing to note besides the account of incubation and illumination, is that there is not a single moment of discovery that solves all the problems. Although some theoretical descriptions and some artists' accounts emphasize the moment of insight, the sudden falling into place of all the parts, I suspect that extended periods of work full of stops and starts punctuated by surprises large and small is more typical. Along the way, it is easy to become afraid and despair. The idea-in-flesh as it faces the creator may be so far from the creator's intuition of his goal. Other aspects of life which are not so difficult and so lonely may pull him away. The work may be aborted before what for me is the most marvellous, mysterious and, so far, nameless part of the creative

It is the period, for the writer, when the characters take over, when the melodies flow without forcing, when the painting seems to paint itself. The artist is totally absorbed in the work. All the awkwardness that comes from watching yourself at work, from the fear that what you are doing is no good, from careful critical selection is no longer a part of the flow of thought and action. The artist's head, his hands, his lips are totally directed by the forces that have been generated by the sense of direction and the ideas-in-flesh as he is working with them. All intellectual and emotional resources, all skills and experiences become part of the artist's reach and movement toward the eventual goal. This *total centration* is a particular kind of consciousness. I am not speaking of a drug state; in fact, I suspect that a sustained period of total centration might be almost impossible under drugs.

It's extremely difficult to talk about consciousness and its forms; psychologists gave up many years ago and chose to study what was easier to make manifest and clear. But let me try to point at what I am talking about. As we look at a person in the stream of life, we can think of experience as a constantly changing screen. Sometimes we focus our sense organs and thoughts and actions — which are our cameras — on particular objects in the world; sometimes what is on the screen is the result of scanning. At night, when we go to sleep, we turn the cameras off and internal processes, not intentionally sought after or tied to moving about in the environment, are thrown up on the screen in dreams. While we are awake, sometimes the images are sharply focussed, sometimes blurred. Sometimes we turn our cameras on ourselves and focus on our feelings. As experience progresses from infancy to maturity, the structures of experience, the frameworks which organize the parts on the screen, become differentiated. We become aware of ourselves in relation to others, of a physical world that is separate from self and of a social world that self is separate from, but still dependent on and a part of. This framework of a self which is in the world, a self which acts and wants and needs, a self that is perceived and judged by others, a self which tries and might fail — this framework of self-in-the-world recurrently organizes much of the experience projected on the screen as well as the thoughts and actions that flow from that organization. During periods of total centration, self-in-the-world, as a way of organizing experience, no longer pops in recurrently. For extended periods, the organization, the flow and change, is determined by the object or the task on which attention is centered. Actions and thoughts interact directly with that which attention is centered on without being distracted, or narrowed, or redirected by other concerns. Total centration is not limited to the making of a work of art — the spectator who is completely lost in a film, the ball player whose mind and body — his eyes, his arms, his torso — are centered on the ball that is coming at him, the attentive student reaching to grasp what a teacher is explaining may be totally cen-

These are wonderful times; they have been described as moments of full spontaneity and freedom. But the freedom and spontaneity do not come from no structure or no direction to the flow of thought, but from such total concentration on a task and *its* direction and *its* structure, that all resources are directed toward it. The person is freed of self-consciousness, of personal fears and hopes, and can respond fully and freely and spontaneously to whatever he is centered on.⁶

In the creative episode, when a period of total centration is reached, the developing work is the center. Only it is on the screen of experience and the patterns of thought, action and feeling can freely act on *it* and in terms of it without an intermediary framework which would change the pattern. It is to describe these periods, when what organizes and directs experience cannot be accounted for in terms of a conscious self acting in the world, that psychologists and artists themselves speak of primitive processes taking over. It is the personal unconscious, those repressed infantile wishes which now can emerge to act on the work, says Freud. It is the archetypal forms, those universal images that can finally organize the work, says Jung. Something like structure of personal emotional life and universal archetypal forms may indeed contribute to the development of the work, for at this point, no selective mechanism is preventing any important psychic pattern from being drawn into the work. But so too are those hard-won patterns of thought and skill, the intricacies grasped in perception, and those bits and pieces of work, awkward and awful as they seemed, which were early attempts to get at the something which impelled the artist. "A poem uses everything we know, the surprising things we notice, whatever we can't solve and that keeps on growing, but it has to reach beyond autobiography even to stay on the page," wrote Jane Cooper.

During the period of total centration, all the patterns of the mind are potentially active. There is a center toward which all the activity flows, and I believe that center is neither the personal nor the collective unconscious but that growing object in the world, those developing ideas-in-flesh, developing in relation to that initial intuition which started the creative episode and the goal of articulate statement in the medium. This is the magnet that attracts and patterns all those resources which become available.

These periods are recalled as periods of incredible joy, even ecstasy. Thought and action, interaction with the work becomes as smooth and flowing as a dance, and ideas seem to emerge out of nowhere. The work seems to create itself, because the creator's picture of himself as working does not obstruct the flow between himself and his work.

It would be nice to report that once total centration is reached, all problems are solved and the work is finished. Sometimes, some lucky times, this is how the creative episode reaches a climactic

in waves. If the work is a long or complex work, days and weeks of work are involved and in that time, the attention of the artist must be shared by other aspects of life. Centration achieved one day is lost the next. Aloneness valued one day because it is one of the conditions of centration becomes a horror of loneliness and emptiness the next. Artists do all sorts of tricks to try to lose themselves and get centered on the work. They play divergent thinking games, do Yoga or meditation, establish private rituals, order themselves to sit with their work a prescribed number of hours a day, go into psychoanalysis to get access to material they think may be preventing them from giving themselves to the work. This last way is a reminder that it is difficult for someone who is deeply frightened to achieve centration, because centration requires that no aspect of psychic structure be forbidden territory. This is what Jane Cooper meant when she spoke of "the necessary vulnerability that is involved in making decent poems."

The pull of the work must be very strong, strong enough to survive the frustrations of the early attempts in the medium which seem to mock, the turning away from the work, the achievement, then the loss of centration. What is the pull? I'll let Grace Paley tell you what the pull is for her. We were discussing one of the stories in which she said she was writing about a boy who was trying to be a "good and creative" person. Someone asked whether she thought the words were synonymous. She said no, but that people who want to be good interest her very much. Now I'll quote exactly.

Question: Then there's no morality that seems to underlie creative people.

Grace Paley: It's the morality of telling the truth. That has to be the prime and only thing. To be an artist is to have an absolute compulsion to tell the truth. Some people just want to be writers. That's different already. It's not the same thing at all.

Question: Did you want to be a writer?

Grace Paley: Yes, I did. I really wanted to be a writer . . . I always did think I was a writer, and though I thought of myself as a writer, it was only when I hit that thing, which was not when I was young — it wasn't until I had developed this absolute compulsion to know the truth somehow, to deal with it, that I really considered that I became a writer dealing with it at all, or that I wrote decently.

"How do you know when a poem is done?" We asked Jane Cooper. "It's like a drawer clicking shut," she said, quoting Yeats. But then she added, "At a certain point you know that it's the best you can get it." And at that point the creative episode has reached its other boundary. From the initial sense of direction through the awkward

first attempts in the medium which make the impulse into a thing in the world, perhaps a turning away, through cycles of centration and failure, finally a work is made. Now the artist turns to the world and shares the truth he has captured in flesh. This is another important period in the life of the artist. Like each of us, the artist is a social human being who needs a place in the social world and a function in the social order, perhaps all the more because so much of his work is solitary. The act of communication, of showing the work is his communion, his affirmation of relatedness to human society.

We have followed the creative episode through time. Now let us look again at the paradoxes with which we began. The creative process involves freedom and spontaneity. The creative process demands discipline and concentration. It involves the primitive and the emotional, intelligence and thought; it calls upon fantasy and inventiveness, a willingness to deviate from what is; it demands honesty and a commitment to truth. It is an expression of self and it cannot take place without forgetting the self; it is a joy and a terror; it is its own reward; it requires encouragement and understanding from others. From the perspective of time, they no longer seem so paradoxical.

I didn't know I was going to write this when I began to think about the creative process. I would like to thank Mrs. Winsor and the Committee for giving me this opportunity to discover my thoughts, and I would like to thank all of you for letting me share them with you.

Notes

1. In addition to these theories, the course also includes the works of Rudolf Arnheim, Solomon Asch and Max Wertheimer — and the works of Lawrence Kubie, Ernst Kris, Ernest Schachtel, Frank Barron, and Anne Roe.
2. Arnheim has looked closely at the visual medium and the way in which artists think in it. See his **Visual Thinking** (Berkeley: University of California Press, 1969) and his **Art and Visual Perception** (Berkeley: University of California Press, 1954).
3. I am indebted to Solomon Asch's analysis of emotion put forth in his **Social Psychology** (New York: Prentice-Hall, 1952).
4. Arnheim chronicles the progress of Picasso's thinking in the medium through time as he worked on the mural **Guernica**. See Arnheim, **R. Picasso's Guernica: The Genesis of a Painting**. (Berkeley: University of California Press, 1962).
5. This line of thinking associates incubation with the tension of incomplete tasks studied by Bluma Zeigarnik and Kurt Lewin.
6. This account of total centration was stimulated and influenced by Max Wertheimer's account of centering on a problem in order to do "productive thinking." See his **Productive Thinking** (New York: 1959).

ZONE VI Newsletter

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"Whether he is an artist or not, the photographer is a joyous sensualist, for the simple reason that the eye traffics in feelings, not in thoughts. This man is in effect voyeur by nature; he is also reporter, tinkerer, and spy. What keeps him going is pure absorption, incurable childishness, and healthy defiance of Puritanism-Calvinism. The life of his guild is combined scramble and love's labor lost."

Walker Evans
The Massachusetts Review, Vol.XIX #4

Incurable childishness for sure, my usually baseless faith that the weather will improve, and lack of an attractive alternative, all conspired to leave me stranded in the 4x4 foot shelter near the ferry dock. I was on the tiny island of Iona in the Hebrides. The rain was sluicing down and the winds, I found out later, were gusting at over fifty knots. The ferry had dropped me off at 7:00 a.m. It was now four o'clock and the ferry could not return because of the high winds, but I didn't know that at the time. I had just one negative to show for the day.

When I arrived that morning I had plodded through the mud up the hill to the ruins of an ancient nunnery and there I was able to make that one exposure. At 8:00 a.m., when I made it, there was just a trace of Scottish dew (medium rain by U.S. standards) but with the help of the ever ready garbage bag to cover the camera, I was able to make the negative. As soon as I tripped the shutter it started to rain. (The Scottish

version of rain is a hurricane.) I dashed over to the nearby cathedral, a magnificent and historically important structure which I can attest is waterproof, dried off my camera and lens and settled into a cozy pew to await the sun that I was sure would soon appear. Three hours later it was still raining so I decided to get the ferry back to the mainland - in this case another but more substantial island; Mull. When I stepped out of the cathedral I nearly blew all the way down to the ferry slip and my next prison, the telephone-booth-sized ferry waiting shed. It was not waterproof. I waited alone. The residents knew they were not going anywhere that day. I had plenty of time to think and what I thought about was how very little time I spend actually photographing, even when I'm out photographing. And I'm out photographing a lot. I wouldn't be surprised if I spend more time on personal non-commercial work than anyone else, anywhere. I spend an average of three days a week when I'm at home and added to that are two or three extended trips like this one every year. They last for three weeks and I photograph every day I'm away. . .weather permitting. That adds up to about 180 days a year that I'm involved with personal photography. About 2/3 of that time is spent in the field and 1/3 in the darkroom and workroom. That's a lot of time and I still don't have enough. I waste a lot of time. We all do. Time lost to bad weather is outside our control but shouldn't we develop routines to get the maximum usefulness out of every photography hour? If I photograph that many days a year (Note to Lil and Bern: this constant all-season equipment testing under actual field conditions on several continents is vital to the quality control of Zone VI products and somebody has to do it) and I have to be jealous of my time; you have to be even more watchful of yours. I have developed a few darkroom procedures that save time and I'll spell them out later, but for now I'd like to describe a field situation where seemingly lost time was put to some use.

Back to the shiverer in the shed. I had been there about an hour with nothing to read, nothing to listen to but the tearing wind and what seemed, at

first glance, very little to look at. I was indulging in an old habit anyway - making mind pictures. It is a kind of visual daydreaming. When I am driving, for example, I often watch a tree move slowly into a decent compositional relationship against a barn or a hill in the distance and when the tree reaches exactly the right spot...I think the picture. Not just the camera position; I think the whole thing. The lens, the exposure, the print, everything. The most visible and, I am told, annoying manifestation of this obsession occurs when I am in conversation with friends. The surreptitious movements of my head up or down, left or right, to "improve the composition", clear a visual confusion or avoid a merger with some part of the background, etc. does not escape them and usually elicits the comment, "you are doing it again." Most of my mind pictures are made off-handedly and many are made unconsciously but when I have a camera at hand I develop a more aggressive attitude. I do the same thing to other people's pictures but in reverse. It is fascinating to work backward through someone else's picture in an attempt to discover how and why he made it at a certain moment and from a certain position and what his thinking was at the time he did so. Does the picture work? If so, can I figure out why? There is no better way to learn photography than by the exhaustive study of good photographs.

Across the two lane blacktop road in Iona there was a jumble of old gray stucco houses. The scene contained the kind of chaos that, if you could find the key to its organization, might produce an admirable picture. If a little something extra were to show up, maybe a wonderful one.

Tonally it was marvelous and would surely produce a beautiful print. I immediately figured it for Ilfomar #2 paper which would be just exactly right to recreate the soft silvery richness of the atmosphere. Brilliant paper would be too "vibrant." The entire tonal range was encompassed in the window on the right. Pure black to pure white were not only present, they were adjoining. When that happens the black

looks blacker and the white looks whiter. (Black dogs don't have whiter teeth; it just looks that way.) The tonal scale and balance were just as fine as the black to white range. The scale, like a musical scale, marched smoothly through the deepest grays, spent a lot of time on variations of middle C (Zone V) and finally meandered up to the highest values.

Texturally there was variety enough. The rough stucco wall, lighter where it was protected from the rain, contrasted nicely with the slick blackness and whiteness of the window. The shiny wetness of the roofs and road added another interesting textural element.

Compositionally there were strong elements to work with. The window again; the white painted frame and within it there was the upside down white "L" of the lace curtains. The curtain across the top shortened the black of the window above the cross bar which produced a mismatch with that black shape below the bar. It seems a small thing, but a small mismatch like this is more visually intriguing than two identical shapes. There wasn't much I could do to help things by camera placement, but every little bit helps. By adjusting the height of the camera I could make a nice little business with the top of the wall so that it would continue the line of the window sill. This camera height also created the two zig-zags under the next two windows. A small confusion cleaned up, a small area of interest created. How about lateral camera positioning? I couldn't move outside the shed without running the risk of drowning but by pressing the camera up against the left hand wall; using the wall as the third leg of the tripod actually, I could line up the peak of the corrugated iron roof with the angled line of the steel flashing of the dormer behind it. Another small thing, but an improvement over the interrupted line that would have been visually provocative in a part of the picture where I didn't want to attract attention. No other relationships of near and far elements were significantly affected by the slight leftward movement of the camera.

In the middle of the scene behind a low wall was a small courtyard that would provide an impression of depth and add a feeling of presence to the photograph. The low wall, however, was the problem. It was the closest major element; it was large, and it was boring. To start the picture above it was not a solution because without a base the picture would just look disoriented and confused. I decided that there was no picture there, but having absolutely nothing else to do, I figured I'd make a couple of photographs for the purpose of illustrating a point that I always have trouble getting across at workshops. Most students are of the opinion that perspective is changed when lenses of different focal length are employed. That's not so. The fact is, every element in the scene remains in exactly the same relationship to every other regardless of the lens employed. The only way to change perspective is to change camera position. All a wide angle lens does is include more subject area--unless you move the camera. To demonstrate that fact I decided to make two pictures of the same scene from the same camera position. I would use both the lenses I brought to Scotland, the 210 and the 121mm, and the pictures would demonstrate the only difference that occurs; one picture would show more area than the other. I started with the 210 lens and included the curb at the bottom. This not only provided a nice base, it formed a lovely delicate line of two gentle curves interrupted by several pencil thin black joints between the curb stones. On the ground glass, however, it was still no more than a "so what" picture. It looked like a stage set with no actors. Just as I was about to make the exposure, a young lady arrived on her bicycle and parked it exactly right there in front of that featureless wall. It was the world's champion photogenic bicycle. Not one of those jet-age fenderless, impersonal 10-speed whizbangs with the handlebars upside down but a good old-fashioned Model "T" of a girl's bike. The rear tire had a thin whitewall stripe and, at the angle to the camera that the girl had leaned it against the wall, that rear tire would show as a thin white oval in the print. But the front tire had a fat whitewall stripe and the way the front wheel was turned, exactly parallel to the camera back, the

front wheel would show as a fat, white perfect circle. Both wheels were physically the same, but visually different. Another "small thing."

I made an exposure and then changed to the 121mm lens to make the comparison wide angle picture. When focusing the 121 it became painfully apparent that there was an awful lot of featureless black road in the foreground which was not earning its keep. (I'm convinced that every square millimeter of a picture must pay its way.) But I made the picture anyway. Since there was still no sign of the ferry and the rain continued to keep me imprisoned I left the camera set up, put in another holder, pulled the slide, cocked the shutter and sat down. If you're not doing anything you might as well be ready to make a picture. With the camera ready, you probably won't get anything. With the camera in the bag, you definitely won't. All that empty black shiny road...All of a sudden the traditional Scottish (Scotch is whiskey) dog, a smallish black and white collie, wandered onto the scene and stopped right there in the exact place in the road where he was supposed to. I reached up for the cable release and immortalized him on the spot.

I was forced by circumstance to look longer and harder at a scene than I ordinarily would. That, and the fact that the camera was ready, made the picture possible. When we race through the world looking for some obvious and over-powering attraction that will make our picture for us we always come up empty. (Want to buy a print of the Eiffel Tower or Mt. Rushmore? I thought not.) The pictures that are moving are of common things that every one glances at but the photographer sees in a special way and at a certain moment and with a heightened intensity. Sitting in a shed for a couple of hours and making at last a reasonable picture out of something that seemed at first to be without visual impact was a sobering experience. Something is trying to tell me something and what I am hearing is--go slower, work harder, see better.

Good photographs of big landscapes are the rarest kind of picture and you really have to be lucky to get

one. I've gone for a year between good ones. All you can do is be out there a lot of days to increase the odds of being in the right place at the right time. Maybe I should say in the right place at the right light. Exciting light is very rare; that's what makes it exciting! Exciting viewpoints free of human clutter, telephone wires, etc. are also rare. I got a real beauty the evening before the rainy day at Iona and, for a change, I got it the easy way. I had arrived by ferry on the Isle of Mull not long before dark and the sky was threatening. Driving along in the dark-bright storm light I stumbled onto what they used to call on the radio "a free gift." I stopped to frame an exquisite soft landscape. The low easy hills in the foreground gave way to the sea; then islands beyond islands to the horizon. In the deep middle distance a pair of tiny houses would appear in the print like a pair of Van Eyck swans; these tiny counterpoints would dramatize the receding planes and add to the impression of vast and lonely space. In the foreground was a random scatter of snowy sheep. I set up on top of the car and quickly made an exposure although the light was rather gray at that moment.

In photographing a landscape you take what you can get when you can get it and then you wait and hope that the light or the clouds or the sheep, etc. will get better. If you're unlucky the first picture is the best. If you're lucky, the first picture is the worst and subsequent ones are improvements. In other words, take the picture now; things could get worse. Then get ready and wait; things could get better.

After the first exposure in the so-so light I got the camera ready for a second. I set the lens for one stop less than I used for the first exposure because I had no intention of making another negative unless the light improved. All of a sudden a wash of low angled golden light swept across the valley. I tripped the shutter and then the light was gone. I waited until it was quite dark but never got another chance. The second picture, luckily, is very nice. (See enclosure)

Go to Scotland if you can. I went from Mull (the ferry came to Iona the next morning) to Skye and I made some more fine landscapes. The best was in a place called Waternish. The light was fantastic and it kept getting better; at least it was changing fast and as cloud shadows raced across the land I kept making exposures not knowing whether the last one was better than an earlier one but knowing that all the negatives would be beautiful. Scotland in the Western Highlands is rugged and hilly and forested, but in the Outer Hebrides, it is barren of trees, lonely and wild. Though the outer islands, such as North and South Uist and Benbecula, are small, they give an impression of vast windy spaces. There is a conflict that is very exciting; a sweetness of the rolling soft hill shapes is offset by an almost constant underlying threat of climatic violence. Do you know the way that dogs get edgy before a thunder storm? The Western Islands made me feel that way, but perhaps they only have that effect during certain seasons.

If you go, bring lots of money. A poor meal (expect no good ones) will cost you about 8 pounds (\$20.00). Car rental for $2\frac{1}{2}$ weeks cost me \$700.00, not including gas. Gas is \$3.00 per U.S. gallon. A Bed and Breakfast overnight in a private home with the bathroom down the hall will be about \$15.00 and in a mediocre hotel (there are no good ones) you can figure \$50.00. Other than money, the most important thing to bring is wet weather gear. Rubber boots and a slicker. It rains a lot and it's cold. Forty degrees with a lot of wind and dampness is average for fall.

I did not get as far as the islands of Lewis and Harris because I cancelled my plans to keep moving when I saw Uist. In the spring I would like to go to Uist again and then on to Harris and Lewis where, at Callanish, there is a marvelous ring of standing stones. Then northeast to the Orkney and Shetland Islands. (Got to keep testing that equipment under actual field conditions, etc.)

"For me, the intellect is always the guide but not the goal of the performance. Three things have to be coordinated and not one must stick out. Not too much intellect because it can become scholastic. Not too much heart because it can become schmaltz. Not too much technique because you become a mechanic. Always there should be a little mistake here and there--I am for it. The people who don't do mistakes are cold like ice. It takes risk to make a mistake. If you don't take risk, you are boring. These youngsters who win a competition are like the assembly line. Every trill is so perfect but everyone is the same and in 10 minutes you will be bored and go home."

Vladimir Horowitz

The story of the two Iona pictures should not be interpreted as anything more than an attempt to describe how certain things--some within and some outside the photographer's control--can help him, and to illustrate that many picture opportunities are missed because we don't give those things a chance to develop. I do not think either picture is wonderful; I do think they are about as decent a result as could be obtained of that scene on that day. Of the 100 negatives made on the trip, I would rate these among the lower fifth. They've got too much technique (visual) and too much intellect. Not enough heart.

Saving Time

It's true you can learn by your own experience - eventually - but if you want to learn fast, utilize the experience of others. There are accomplished photographers who can save you time by telling you exactly how to do it. Their photographs prove they know what they are doing. Use their knowledge to save

your time. If the great printers all use cold light... use cold light. Don't waste time; don't think about it; don't get another opinion, don't get into a discussion of theory. LOOK AT THEIR PICTURES, do it, and be finished with it. I'm reminded of a story, perhaps it was in John McPhee's book, "Coming Into The Country," that illustrates exactly what I am driving at. It concerns a successful and well-known trapper who has lived far above the Arctic circle near College, Alaska for about twenty years. Many young people, most of whom have never lived very far from Los Angeles, have sought his counsel on his techniques for survival. He patiently touches on many aspects but dwells exhaustively on the one aspect that he considers vital; the best means of transport, both on the trapline and through the country in general. He tells these novices to get dogs. The alternative is a snowmobile, but dogs have the following advantages: They will always start in the morning, never run out of gas, keep you warm at night, guard your equipment, keep you company and, in the ultimate emergency, a dogburger packs a lot more nutritional value than a snomoburger.

Convinced? I am, but what do the flatlanders do? They buy a snowmobile from a persuasive salesman who's never been north of Seattle. None of them lasts more than one winter, most last less. My guess is that they fail more because they don't have the wit to listen to someone who knows than because they bought a snow machine. Many photographers make the same mistake.

The rule: Learn from other people's experience, but make sure the "other people" are photographers, not photo writers, not camera salesmen, not photo talkers. How can you tell who's who? Look at the pictures. Don't waste time attempting to make photographs while doing something else. Most people whip out a camera as part of the day's amusements and snap off a few. Nobody ever wrote a cello sonata while watching TV and you are not going to make any good pictures unless you set aside time to devote exclusively to that. To get the most out of the precious hours, I have worked out a few procedures you might find useful.

1. Have your gear ready. Once I went on a trip with a famous photographer. I called for him before dawn, woke him up, waited while he had breakfast, while he loaded his film holders, and then finally started getting his gear together. By the time we got moving, the morning light was gone. Load the car the night before so that the only item you have to add in the morning is you. On second thought, if you live in a city, that might not be such a good idea. Get up early and get to some place ready to photograph something before first light. That way the light works for you; you have the options. If you arrive at ten o'clock, you take what you get (what everyone else gets, because everyone else arrives at ten o'clock too).

2. Look only for the kind of photographs that are possible on the day you have available. When the light is poor, think in terms of detail, in terms of pointing the camera down. Don't head for the high country thinking in terms of landscape. Portraits can be made in any light and most of mine are made in open shade. On a cloudy day, it's all "open shade." In great light, and if there are exciting clouds, I think in terms of landscape. I have a book in which I have noted good landscape possibilities that I found when the light was not exciting. In good light I head for one of those places. Travel in a photogenic direction and I don't mean in a metaphysical sense. If you are in the country and interested in the natural scene, drive with the sun behind you or beside you. That's the direction from which you will be photographing most of the time. The best time to photograph is when no one else is. Very early, very late, and in atrocious weather. Most pictures are made about noon on a lovely summer's day and they look it. Bland.

3. The darkroom, like the camera bag, should be organized so that there is a place for everything. If there is no place for something, make one or throw the thing out. Throw out all gadgets. Mix chemicals in advance. Nothing is more annoying than to walk into the darkroom ready to print and have to spend an hour

straightening up, scrubbing, or mixing developer, etc. Make sure the darkroom will be ready when you are.

4. Making "work prints" is a waste of time as well as being a cop-out. If a negative is at all worth printing it should get a fine print treatment. And no photographer should ever allow himself to get in the habit of making so-so prints. A problem with 35mm and $2\frac{1}{4}$ is that you can't see enough in the proof to tell you which negative, if any, to print. You can't see a facial expression or even if the image is in focus. A lot of photographers send out 35mm negatives to be proofed on an 8x10 enlarger. The lab sandwiches a roll of film cut into strips into a glass 8x10 negative carrier and then they enlarge the whole roll onto an 11x14 or 16x20 sheet of paper. You must coach the lab on making a "proper proof" exposure or they will expose so that most of the pictures look good to them. The enlarged proof is a time saver and I think it should be standard procedure for anyone using small film.

I've done a lot of work on new printing procedures for efficient use of time and will describe them in the next Newsletter. I'll also describe what must be the best enlarger in the history of the medium. It is mine and it was modified into an electronic marvel three months ago by Prof. Paul Horowitz of Harvard. Paul is perhaps best known (in photographic circles) as "The Father of the Feeper."

Happy Holidays,

A handwritten signature in dark ink, appearing to read "Fred Picker". The signature is fluid and cursive, with a large, sweeping initial 'F'.





ZONE VI Newsletter

NEWSLETTER #28
March 1981

"If you are in a hurry, dress slowly."

Jade Wah Restaurant fortune cookie

I've developed a few printing procedures that for me are extremely worthwhile. The first steps are quite mechanical and, for that reason, readers might assume that a sensitive print cannot result. But I have found that only by adopting a precise, controlled routine at the start of a print is a sensitive result possible at the finish. You must get to a point of final printing quickly. That means you must get the "formula" -- the print size, the paper, the exposure, and the development time information quickly. Why? Because your time of greatest sensitivity in the darkroom is limited.

I know that a three hour session is it for me if I'm doing demanding work. After three hours I can still do routine darkroom chores but I won't print well. After a printing session I develop negatives, mix chemicals, tone prints, proof negatives, file, and clean up. I like to print early in the day. People who head for the darkroom after a big dinner, which might have included a little wine or beer, and print until 3:00 a.m. don't print very well.

Two negatives...ONLY. And two is realistic only if I have printed one before or if the first new negative prints very easily. If I am printing one of the two negatives for the second time, I print that one last because I am sharper at first. You may do better with a "warm-up." If so, print the old negative first. Small negatives are far more difficult to print than large ones, and to make a good print from one takes longer, but photographers who make small negatives have a lot more negatives than photographers who make large ones. I think that is one of the

reasons why prints from small negatives are so often hurried attempts. How do you choose two negatives from the four rolls (144) of 35mm negatives you exposed over the weekend? The small format photographer often dashes through 15 inferior negatives and produces nothing of value. Careful editing is indicated. I've probably flogged the "proper proof" to death but it is the vital first step in printing a negative. It not only shows you which negative to print, it shows you how the negative, in its natural unmanipulated state, looks as a print. (Printing negatives that don't deserve to be printed is the most time-wasting procedure in photography. It is very common.)

If I have only three sharp hours in the darkroom, it is important that I don't waste time getting ready to print. Everything is always clean, orderly, and ready to go; chemicals are mixed.

My procedure: Turn on cold light to warm it up. Clean and insert the negative in the carrier. The proof of the 4x5 negative I intend to print doesn't look at all bad for size, so I decide on a moderate enlargement. About a 7x9. If I don't have strong convictions on the exact size of a print, I usually get away from the boring 8x10 and 11x14 sizes. I don't feel that the 4x5, 8x10, etc. shape is the most attractive. Something slightly longer seems to have more...direction? The 35mm shape, however, is too long. These considerations would come into play only if I have the option of making those small adjustments of print shape without affecting other aspects of the picture. I don't like square prints.

The enlarger is set up for about a 7x9 print and the image is focused on the easel. Never "crop on the easel." The person who made the picture (you) has the right to see it all. Cropping to create a composition indicates the picture was not well seen and is a good reason for choosing another negative. After the negative is focused I fill the trays. Why let them stand around oxidizing? Lights off now and re-focus the negative. It may have sagged or rearranged itself while you filled the trays. I check the green light on my stabilizer to make sure it is "stabilizing." More about that later.

Uninformed folks often entertain the notion that if a negative is exposed and/or developed "correctly," a print

can always be made on #2 paper. That's ridiculous; contrast depends more on the scene photographed than on exposure or development. I know of no accomplished printer who doesn't have a full arsenal of paper grades at his disposal. Time was when you also had brands of differing characteristics to choose from. Was there ever anything like Ilfomar for portraits? Or Brilliant for vibrant architectural and landscapes where you needed BLACK, and definition (edge effect)? Looking at the proof, I can't be sure of paper grade. The proper proof, always printed on #2, looks good, but the enlargement will be different. An enlargement, either actually or perhaps only apparently, seems to lose contrast on the way up. (Condenser enlargements gain contrast by blocking high values, however.) I don't want to waste time. I'm going to make a test strip print of that negative on both #2 and #3 papers. I've made a looseleaf darkroom book and I turn to Ilfobrom #2 which has its own page. It says, among a lot of other things, "8x10 from 4x5 neg. 21 sec, f/16." That's the approximate printing time from a negative that looks good on the proper proof. A careful test strip is vital. It must meet the following criteria:

(1) The "proper" exposure must be at least six or seven exposures down the line. In other words, if the second or third strip looks OK (six or nine seconds), the test strip print is no good because the 100% difference between the first and second exposures and the 50% difference between the second and third are much too gross to make a precise evaluation. Even if six or nine seconds were the right exposure, the short time would not be sufficient for burning and dodging with precision. I have a Strand print on the back of which he wrote the whole "recipe" for the making of that print. His basic exposure was 45 seconds. I regard 15 seconds as minimum.

(2) The "proper" strip should not be the last (darkest) one because how do you know that the one after it -- the one that isn't there -- wouldn't be better? You must have the information necessary to make a comparison. A print's value are only "right" in comparison with what other values are available.

I expose a whole sheet of #2 paper for three seconds; then cover one inch at the right with a card and expose three seconds more. I do that ten times, moving the card

one inch to the left between exposures. Then I check the #3 Ilfobrom page in my book and it advises me that 24 seconds is OK. I can use the same f/stop I used for the #2 because I'm exposing up to 30 seconds and, besides, the prints are smaller than 8x10 so the times should be shorter than my book says. I expose one paper after the other, writing on the backs with a #1 pencil, "Ilfobrom #2, 3 sec" and "Ilfobrom #3, 3 sec." I don't have to write the f/stop because I won't be changing it. I develop both prints together for two minutes, stop bath for 30 seconds, fix for one minute, and turn on the white light.

Assume we are making a print of the photograph on the next page. Looking at the high values, clouds in this case, I find that I still haven't got all the information I want. I'm satisfied that the 15 second exposure on the #2 paper is too short because there is no trace of tone in the clouds. It is chalk, like the print border. But the 18 second exposure shows tone. Will something in-between be better than either? The same situation exists with the #3 but here the 18 second exposure is too short. What I'm looking for is the slightest trace of tone in the high values. I need more information. I'll start out with what I know, find out what I don't. I know 15 seconds is too short for the #2 so I expose #2 paper for five 3-sec. exposures, add 1 second, then cover half the sheet and add another second. Next, I do the same with #3, but start with six 3-sec. exposures. I develop the prints together and compare. (It seems I always have more than one print in the developer at a time because there is usually more than one thing I have to find out. For instance, what a waste it would have been to do all this on #2 and then have to start over and do it on #3.) The high values of the #2 print look first rate at 16 seconds and the #3 at 20 seconds. The exposure is known. We're gaining.

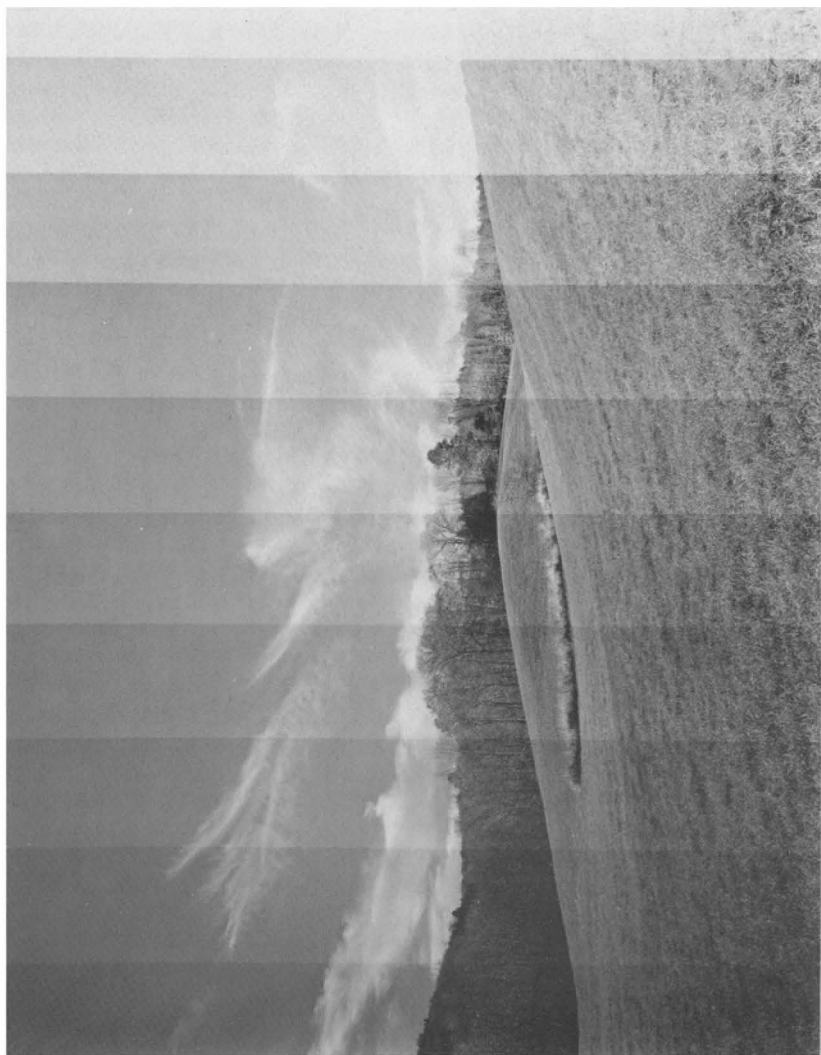
The clouds in both prints show the slightest trace of tone against the white print borders. If you have the "special edition print" of our Spring Special, look at the intersection of the white boat with the white print border. That's what I mean. Pure white (paper base) is empty of feeling but a trace of tone indicates life and adds brilliance. Now, which paper? #2 looks marginal for contrast for this negative and print size, and I know that when it dries down it will lose more contrast and will surely be too soft. #3 looks pretty good but a trifle...strong. It doesn't feel quite right. It's airless. I'm going to make another print

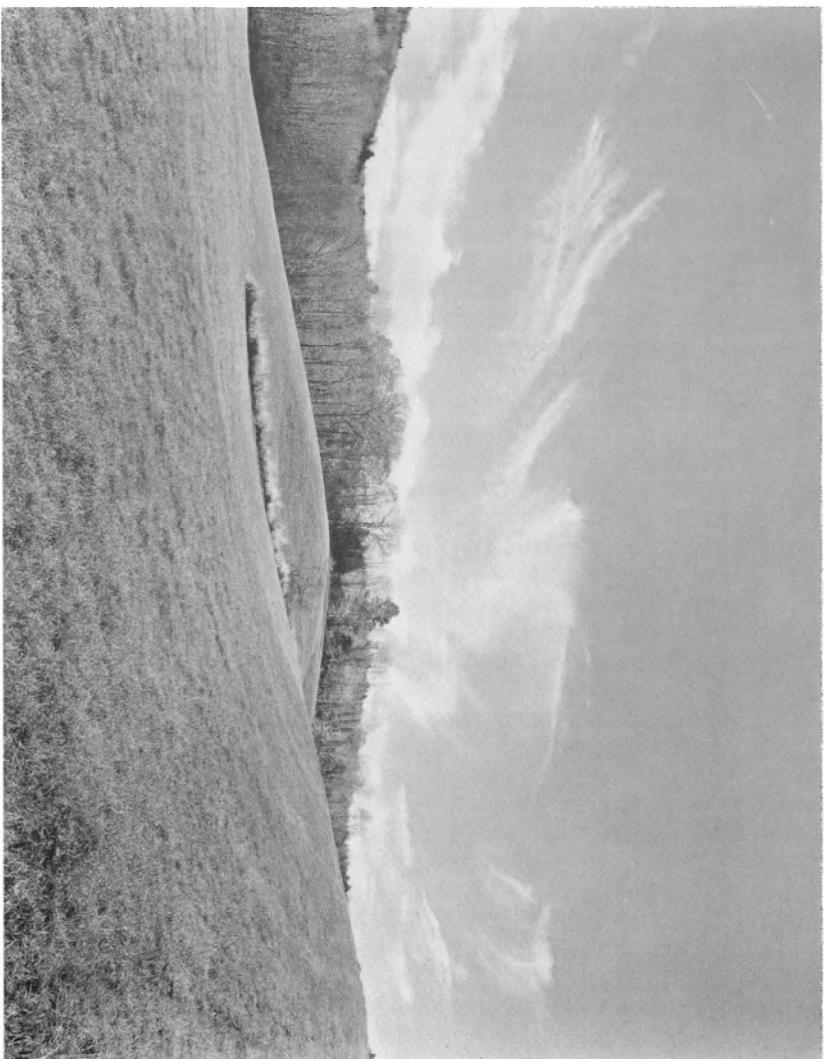
on #3 and develop it for three minutes. I don't always know what the emotional effect of a development time change will be on a specific print but I want to shake the cage a bit before going on. I look in my book again and it says that for #3 Ilfobrom, if I want to develop for three minutes and still match the high values of a print developed for two minutes, I have to reduce the exposure by 20%. Your percentage might be different; here's how to find out. Expose two test strip prints and write "3 min." on the back of one and "2 min." on the other and develop for those times and compare. Count the strips and write down the percentage difference of the ones that match. For example, if the 27 second strip on the two minute print matches the 24 second strip on the three minute print, divide 24 by 27 and you get .88 which would be the percentage of the original exposure required when developing for three minutes.

In this case, I write on the back "#3 Brom Pilot 16 sec 3 min." because 80% is the factor for this paper in my darkroom. To keep things as consistent as possible, I give the print five three-second exposures and then reset the timer for a one-second exposure. (I immediately reset the timer to three seconds so that I don't mess up the next print.) The three minute print works out well in this case and seems better balanced tonally than the two minute print. If three minutes is better than two for this print, how do I know four isn't still better? You never know how far you can go until you've gone too far. (Ed. Note: This philosophy does not apply to life.) To see how far you can go, ruin it -- then back off. So I check my book again and expose the next print less and develop it for four minutes and compare. No good. Four minutes changed the picture from soft dawn to 8:00 a.m.

These changes are subtle. Printing consists of making esthetic choices even while following a mechanical routine. The mechanics are easy and can be learned by rote; the esthetics are difficult. Studying good prints is the best way I know to learn to print. You must constantly ask yourself "is it flesh is it light has it substance and space...is it life?" It's very hard. That's why there are so few good printers.

The foregoing procedures may sound time-consuming and tedious but many photographers have spent literally thousands of hours in haphazard hit-or-miss procedures and have yet to





NOTE: The tones of these reproductions will only approximate the text description.

make one excellent print. That's time-consuming and tedious!

We're more than halfway home. We have the formula: the right paper grade, the right development time, and the right exposure. An excellent pilot print has been made. This pilot, if you do it as described, will be a better print than almost any commercial lab or professional photographer has ever turned out.

Now to put the icing on it. Examine it for tonal balance. Is it falling off at the edges? All prints do a bit but the worst are those made with a condenser enlarger and/or an enlarging lens of the "recommended" length. A longer lens makes a big difference in sharpness as well as fall-off. Also, adjusting condensers to the next larger negative size than the negative you're using will help whether or not you have a longer lens. The print that I'm working on (previous page) is a sweeping meadow with a line of trees at the horizon and a sky with wispy clouds. If you have the monograph, see page 34 for a far better reproduction. How much do I have to burn the edges to balance up the print? I look in my book again and right under where it tells me what percentage I have to increase my exposure to make an 11x14 over that used for an 8x10, it tells me what percentage of the base exposure I have to add to the edges to even out. Here's How (as they say in the photo mags): Focus your enlarger for an 8x10, take out the negative, stop down to f/16 and set the timer for one second. Make an exposure. Cover up one inch at the right with a card and make another exposure. Move another inch to the left, etc. If the middle strip is a print value of V, VI, or VII, wash and dry the print. If not, give more or less exposure so that you end up with a middlish gray in the middle of the paper. When the print is dry, cut a one inch square out of the middle of the print and move it along the edge until you find the tone at the print edge that matches the tone of the square. If, for example, your middle strip was exposed for five seconds and it matches the section of your edge which was exposed for seven seconds, you would always add 30% of your base exposure to the edges in order to match them to the center. (I hate to give actual examples like the above because by next year a whole bunch of people will have written, accusingly, "You said add 30% to the edges and that's wrong.")

I take a sheet of #3 and write "20 sec. plus 6 sec.

edge burn, 3 min. dev." The edge-burned print is photo-metrically accurate. It's exposed properly and evenly, edge to edge, and it's on the right grade of paper, developed for the right length of time. It's scientifically terrific and so is Bach played by a computer. Neither are alive. Now to make it an exciting and emotional experience. Many would say that you shouldn't mess around with a print at this point, that manipulation (the word has a nasty sound) is some sort of trickery and not pure. I disagree. Nothing you did was casual from the moment you made the picture until now. You passed dozens of meadows before you chose to photograph this one. You went back a half dozen times to get it in the most exciting light, you chose the camera position with care. In short, you wanted nothing less than the most dramatic presentation of the scene possible. Do you think that Hernandez, New Mexico always has a full moon and those unbelievable whipped cream clouds hovering above while the last rays of the sun light up the crosses in the foreground? Sure it does...every forty years or so, for about two minutes.

I want to emphasize, dramatize, present those aspects of the subject that moved me to photograph it in the first place.

The meadow is smooth and the soft roll of the hill is sensual. The low easy hill follows the shape of the slightly darker line of trees behind it. The light striking the hilltop is emphasized by the darker trees behind, making the crest of the hill appear silvery when compared to the other hill tones. It's lovely. I want to take it as far as it can go in the direction it is already going. How much can I lighten it? I go back to the test strip on the #3 paper developed for three minutes and I can see that the strip exposed for two seconds less than the basic exposure will be fine. Great precision of exposure isn't necessary because the line is so thin. Nor is it possible because I will have to "jiggle" a bent wire to dodge the hilltop. Jiggling is necessary to avoid a hard line but also makes the reduction only approximate. Jiggling for three seconds will probably add up to the equivalent of two seconds, more or less. That will do, I think. Why not be sure? OK...let's be sure. I'll expose two sheets exactly the same but dodge one for three seconds and one for six seconds. That should surround it. I make the exposures, marking the prints "minus 3 sec" and "minus 6 sec." To get the wire

into the right shape for dodging, I set the timer on "focus" and open up the lens to get a bright image on the easel. Then I bend the wire to the shape of the hilltop and practice dodging for a while. Coat hanger wire is good for this sort of thing. You increase the width of the dodged area by holding the wire closer to the lens.

The two prints are developed and the three second dodge on the hilltop looks elegant. The six second dodge is excessive. Dodging must be performed during the initial exposure. Burning is added after the initial exposure.

Anything else? There are some gentle tonal modulations in the meadow itself. I'll take them a bit farther with a window screen dodger, further lightening the lighter areas of the meadow. Restraint here. The second test strip print shows that one second less should do. With the window screen dodger you have to dodge four times as long to get the equivalent of a solid dodger. I'll be conservative and dodge three seconds. Since this might be a good print, I re-focus the negative before proceeding. One hour has passed. I make the initial exposure during which I dodge the top of the hill with the wire for three seconds and then each lighter foreground area with the screen for three seconds. The developed print looks fine. This negative prints like a song. I have no more suggestions to make to it. But this print will dry down and will not look the way it does wet. I examine my book and see that Ilfobrom #3 requires a reduction in exposure of X% to exactly counteract the dry down factor (see Newsletter 22 for "How To") so that a dry print will match a wet one. I smugly turn the dry down knob of my stabilizer (see enclosed material) to minus X% and expose three sheets of paper as before and develop them all together.

All other prints are now thrown out. After a five minute fixing with agitation, I put these three prints in the washer and, if I am up for it, I start another negative. Believe me, the procedures above are fast. The careful step-by-step procedure, never going ahead to the next step until you've gotten the information you needed from the last one, is the key to doing it quickly and well. The above print took $1\frac{1}{2}$ hours.

I don't tone at the end of each printing session. I put the prints in the washer and give them a good wash.

I just let them soak eight or ten hours after a one hour wash. Then I dry them face down on screens and put them in a box labeled "To be Toned." When I have enough prints to make it worthwhile, I soak them all in water for ten minutes tone them, and wash again. Note: You must wash thoroughly on the first wash as well as the second. If you don't, two things will happen: you will contaminate your screens and all subsequent prints; and the fixer, once dried into the print, will never wash out.

The reason that I make three prints is that the next time someone orders a print I won't have to make one. That's the theory. The actuality is that I have a conviction that a fresh print has more energy or that I can always do it a little better next time or that 'at these prices' I owe it to the buyer to make him his very own print. Anyway, every time I get an order I make a new print. "Vintage" prints, that is, according to gallery mumbo jumbo, prints made at or near the time of exposure are the most valuable. Maybe in the marketplace, but I hope that each subsequent printing of a negative will be an improvement.

*

Zone VI has come a distance since the "Zone VI Workshop" was published in 1972. I "bound" the first edition in my garage in White Plains in loose-leaf binders from the local stationery store. Seven copies were blue, the other four were green. Total sales now approach 100,000 copies and a revision is indicated, but I'll miss the wavy type (I set the type and made the half-tones, too.)

Last year we doubled the size of our corporate headquarters in Newfane and, where once cows lounged and munched silage, Lil, Bern, Rick, Lise, Kevin and Judy I lounge and munch chocolate chip cookies. Judy II comes in three afternoons a week and bookkeeps. Orders are filled to a Mozart or Beethoven accompaniment, with a current preference for the string quartets, but Bern demands equal time for Opera.

The workshops remain popular. We take seventy at each and have two a year. June is full for this year but there are still a dozen spots open for August at this writing. We have an outstanding new instructor this year. His name is Alen MacWeeney and his photographs of the tinkers in Ireland are well known to readers of Aperture and were recently published in Popular Photography. He was assistant

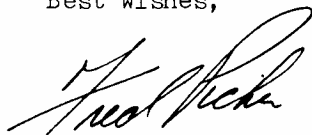
to Richard Avedon and is now a commercial photographer in New York City. He uses 35mm mostly and uses it well. He is terrific (look at the pictures) at photographing people.

Developing new products is the most exciting aspect of Zone VI, as far as I'm concerned. I enjoy getting involved in the design and manufacture of things that should be made. I've been thinking about another tool for a long time.

Consider this: There are four controls we have at our disposal for tonal rendering. There is negative exposure and negative development and there is print exposure and print development. Tools to control negative and print development are simple. All we need are thermometers, measuring graduates, and timers...and we have them. With Paul's stabilizer we can precisely control paper exposure. The one area that is badly controlled is the most important of all; it is negative exposure and the reason it is the most important of the four controls is that an error at the time of exposure is irreparable. We have never had a proper tool for negative exposure control. Exposure meters that are no more than $1\frac{1}{2}$ stops non-linear over a one-to-one-million range are extremely rare. I'm talking about \$300.00 to \$500.00 meters. One and one-half stops equals 280% of the proper exposure!

Paul says he can design a meter that will be accurate to within 5% under all conditions, and I believe him. He is working with something called an electronically linearized temperature compensated PIN diode. Has a ring to it, doesn't it? I'll keep you informed.

Best wishes,

A handwritten signature in black ink, appearing to read "Fred Picker", written in a cursive, flowing style.

ZONE VI Newsletter

SUPPLEMENT to
Newsletter #28
March 1981

"Fine tools contribute to fine work."

Alexander Calder

In the last Newsletter I mentioned that my enlarger had been modified by Paul Horowitz. It was, at that time, possibly the most advanced enlarger in the history of the medium. Now it has become one of two because Ansel Adams has since acquired one just like "it." I'll tell you what "it" is but first I'll tell you what Paul is.

Paul is a summa cum laude graduate of Harvard University with a Ph.D. in Physics. He is now a full professor of Physics at Harvard. He is 38.

His research has included: Optical studies of pulsars x-ray microscopy and synchrotron radiation, coded-aperture spectrometry, proton microscopy, speckle imaging, bacterial rotary engines, and radiofrequency searches for extraterrestrial intelligence. He is the author of "The Art of Electronics," Cambridge University Press, 1981.

Paul's devotion of time to Zone VI projects is akin to a conceptual designer of nuclear explosives entering the science of swatting flies. He does it because he loves photography, loves problem solving, and because, I am delighted to say, we are friends. We became acquainted when he attended my workshop and working on problems with him is a delight. (He works, I goad.)

"It" is a stabilizer control for enlarger heads. Perhaps the best description of the problem and the path to its solution lies in the following correspondence:

HARVARD UNIVERSITY

DEPARTMENT OF PHYSICS

LYMAN LABORATORY OF PHYSICS
CAMBRIDGE, MASSACHUSETTS 02138

Feb. 17, 1980

Dear Fred,

I have worked out a nice solution to the problem that you mentioned during our last phone conversation. You remarked that you sometimes had difficulty controlling delicate print values -- an area of snow, for instance, that was just right on the test exposure would sometimes be washed out (or too dark) on the final print. You also reported that the first and last prints of a batch of identical fine prints often showed annoying density variations. You said that your enlarging timer checked out OK, and that you suspected that the light output of your cold light might be varying.

I became curious, since I've experienced some of these same problems (which I assumed were caused by variations in my printing ritual). The brightness (and color) of a cold light head is intrinsically more stable against variations in the power line voltage than is an ordinary incandescent lamp, but of course at some level of scrutiny there must be a residual effect. In addition, I suspected that cold light heads, unlike incandescent lamps, could not be completely tamed by adding a voltage stabilizer, because their brightness is also affected by temperature -- that's why they have a thermostated heater built in. (This effect arises because the mercury pressure in the lamp rises with increasing temperature; the lamp's brightness depends in a complicated way on gas pressure.) Even if the thermostat were completely effective in holding the average temperature constant, you would still expect some variation in temperature (hence brightness) during printing, when the lamp is powered and contributing additional heat. Such an effect might appear as a gradual darkening of successive prints, or unexplained variations in overall print density depending on whether you exposed the print immediately after focussing the enlarger (lamp hot) or after you finished processing the last print (lamp warm). In other words, your symptoms could have a sensible explanation in terms of cold light head characteristics.

To find out what was going on, I began by setting up an accurate and stable recording photometer under controlled laboratory conditions (stabilized power line voltage), making measurements on an optical bench of the brightness of both incandescent and cold light heads, as

determined by 1) power line voltage, and 2) warm-up effects in the lamp. I used a type 111 incandescent lamp (as used in the Beseler 23C), and a **Zone VI** (Aristo) cold light head for comparison. As expected, the incandescent lamp's brightness showed great sensitivity to line voltage, a measured 14% for a 5 volt change at 120 volts. Power line changes of this magnitude are common. By comparison, the cold light head showed considerably better stability, registering a 3.4% brightness change under the same conditions (see **Graph A**). With typical power line variations, which amount to one or two volts (short term), up to as much as 5 volts or more from one hour to another, these measured brightness variations would be barely noticeable with the cold light head, but quite serious in an enlarger equipped with an incandescent lamp.

Next I measured the brightness change as the lamps warmed up from a cold start; in the case of the cold light head the thermostat had been running for a long time. In other words, I wanted to see how the lamp brightness would vary during the conditions of a typical print exposure. During these tests I held the power line voltage constant. I found the cold light head's brightness drifted about 15% over a 3 minute exposure, with no end in sight. In addition, it exhibited a predictable "memory" effect -- a short exposure made just after a long focus session would have been off by nearly 20% when compared with a short exposure made in isolation! (See **Graphs B** and **C**, strip-chart records that show how the lamp intensity drifts with time at a fixed 120 volts; they also show the lamps' intensity variations as the power line voltage is varied.) These measured effects would seem to explain your observations completely: A test print exposed just after focussing wouldn't be identical to the actual exposure made 3 or 4 minutes later. Also, a batch of prints exposed one after another from the same negative, then developed together, would yield a set of prints with gradually changing print values.

Because of the obvious virtues of cold light heads, it seemed worthwhile trying to remedy this problem. The best approach always uses **feedback** -- for example, a small photocell might look at the cold light tube, controlling the applied power as necessary in order to keep the detected brightness constant. This approach kills two birds with one stone, making a voltage stabilizer unnecessary since all brightness variations, whatever their origin, are eliminated. Unfortunately, fluorescent (cold light) lamps are notoriously difficult to control, and, for instance, cannot be operated from an ordinary phase-angle control lamp

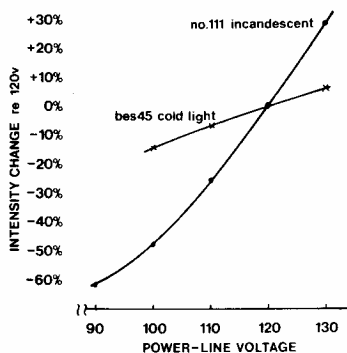
dimmer (the kind you get in the hardware store). An additional problem concerns the photocell used for control: If its sensitivity varies with changing temperature, you're back where you started! Ordinary silicon phototransistors suffer from this defect.

To make a long story short, I've developed a simple, reliable, and extraordinarily effective cold light stabilizer for **Zone VI** cold light heads. All you do is install the photocell in the existing cold light head, then hook the stabilizer between the timer and enlarger (it plugs into the timer, and the enlarger plugs into it). The measured brightness is absolutely rock steady under all conditions -- long exposures, short exposures, power line variations, and violent temperature changes (see **Graph D**). You'll probably like the calibrated "drydown compensator" that I've included in the design: Since the stabilizer controls the brightness precisely, it can also make a precisely calibrated alteration in brightness; the drydown compensator lets you reduce the lamp brightness by anything from 0 to 15%, set by a calibrated knob. Just (!) make your best wet print, then set the drydown compensator according to the paper you're using (e.g., 8% for Ilfobrom #2) and make the final print, **using exactly the same timing**. It will be exposed exactly 8% less (in this example), **including all dodging and burning**, automatically. This is certainly an elegant implementation of your drydown discussion in Newsletter #22.

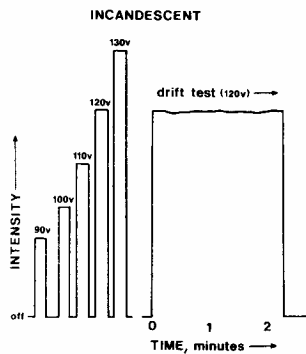
Under separate cover I'm shipping you the stabilizer. Give it your customary acid test, and let me know whether it makes a difference in your ability to control delicate print values consistently. Try it on your next batch printing. Give it hell!

Sincerely,

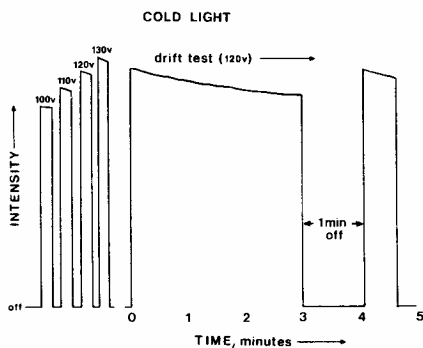
Paul Horowitz
Paul Horowitz
Professor of Physics



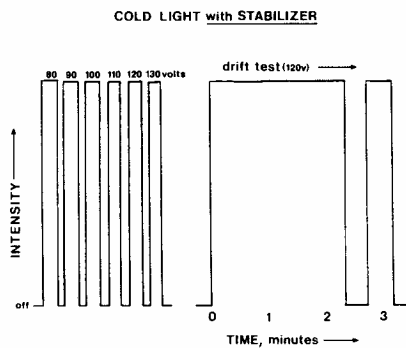
A



B



C



D

I gave it hell. I used it for almost a year and found out what Alan Ross did. With his permission, Alan's letter:

February 11, 1981

Dr. Paul Horowitz
Dept. of Physics
Lyman Laboratory of Physics
Harvard University
Cambridge, Mass 02138

Dear Dr. Horowitz,

You may know my name through connection with Ansel Adams. I was Ansel's technical assistant from mid 1974 to mid 1979; and though I moved to San Francisco to open what is becoming a fairly successful commercial studio, I have continued (since 1975) to be Ansel's printer for the Yosemite Special Edition print series.

I understand that you have heard some horror stories about problems I/we have had with consistency of cold light heads. I have been in the position of having to make controlled prints in rapid succession and have been a victim to discouraging losses of prints due to variations in the intensity of the light. The amount of time I would wait between exposures would make a difference in the print.

I never imagined writing a love letter to a physicist, but that is the essence of my sentiment. I was ready to peek into Ansel's codelite with an axe when I tried to print Vernal Falls a couple of months ago; I was lucky to get two prints that looked the same. On January 17th, King Dexter and I gave Vernal Falls another try, with the addition of your stabilizer, and every single print we turned out looked right! I had begun to think that I had something wrong with ME - not being able to make consistent prints - but the first run with your stabilizer produced a totally consistent run. The entire run of 240 prints was consistent from print to print, batch to batch developing!!!

I feel as if you have come up with an answer to my most vexing printing problem. I am truly indebted to your genius.

With best regards,

Alan Ross

2/27/81

Dear Fred:

I must chime in with my friend Alan Ross and underscore how incredible it is to work with the prototype cold light stabilizer you loaned to Ansel for testing purposes. It is truly remarkable to print all morning, shut down for lunch and then return to the darkroom, fire up the enlarger and stabilizer and be able to immediately produce a print identical to the last one made over an hour before.

Thanks to you, Fred, and of course the one-and-only Dr. Horowitz, cold light intensity shift has become a horror of the past.

I couldn't close without telling you that meeting Paul Horowitz may well be one of the most unique experiences of my life. I've never met a person from another dimension before. It was sort of like a close encounter of the third kind! Thank heavens he's on our side...he is on our side, isn't he?

Things are busy as ever here in Carmel and I'm convinced that the youngest member of the staff is the fella with the beard who just celebrated his 79th birthday.

All best to you and everybody at Zone VI.

King Dexter

Paul's recent letter will be of interest to scientific types:

Jan. 20, 1981

Dear Fred,

I'm delighted to hear that your cold light stabilizer makes such a difference in your printing. I must say I'm not surprised, after visiting your darkroom and making measurements on your Codelite, which drifts a whopping **30%** (graph enclosed) during one exposure!

I've been finishing the final drawings for both the new **Zone VI** cold light head and the **Zone VI** stabilizer unit, and want to tell you about some of their important features.

- 1) The new **cold light head** uses the excellent Litton Industries transformer that is absolutely silent and free from vibration; the design of the head itself gives a more uniform distribution of light over the negative; I've managed to improve the pre-heater, eliminating the potentially trouble-prone thermostat and using a dependable conduction-cooled precision power resistor instead of the "economy" glued-on heaters used in earlier units; the new cold light heads all include the zero temperature coefficient photocell and connector used by the stabilizer, so the stabilizer can be added anytime by just plugging it in; finally, the entire head is finished in a handsome and durable two-tone black anodize.
- 2) The guiding philosophy in the design of the **stabilizer** has been that I don't want a single unit returned because of an electronic malfunction. I've used the most reliable components throughout, regardless of price: All internal connectors are gold-plated, an expensive option that often doubles or triples the price, but provides absolutely trouble-free performance; in fact, the use of a gold-plated socket for a power transistor is almost unheard of. Likewise, I've chosen the top "A+" grade (every unit rigorously heat cycled, burned-in, then extensively tested) for the sensitive amplifier circuit, rather than the normal batch-sampled circuits, an option that my electronic assembly company wasn't even aware existed. This philosophy extends to every component -- hermetically sealed ceramic capacitors, the best available computer-grade filter capacitors, glass-epoxy printed circuit boards with silk-screened component legends, captive "clinch nuts" rather than those cheap sheet-metal screws you see in most consumer electronic products -- premium components throughout, conservatively operated at a fraction of maximum capability. The finished units are inspected, tested electrically, then "burned-in" with 24 hours of continuous operation at full power

before undergoing their final pre-shipment electrical testing. I believe this conservative philosophy of design and manufacture makes sense in spite of the additional costs: Unlike the usual practice in consumer electronics, we'll have hassle-free performance and virtually no returns; I'd even wager that it will amount to an economy in the long run, as well as providing a high degree of customer satisfaction. Finally, the unit is physically appealing, being housed in a neat black anodized custom enclosure with bold white markings and color-coded indicator lights for easy use in the darkroom, whether mounted vertically on a wall or placed horizontally on a bench.

Sincerely,

Paul

If you are a non-scientific type like me...

The stabilizer is a small neat box into which I peeked. It contains lots of gleaming wires, what appear to be miniature cuff links of various sizes and colors, delicate blobs of candle wax, tiny striped candy canes, worm trails, etc. It looks wonderful. There is a wire that goes from the box to the enlarger light source and, looking in at the light, there is an eye... A little electric eye... It watches the light.

On the front of the box there are two knobs and a little red and green light. You turn on the enlarger light and let it warm up for a few minutes. Then you turn the stabilizer knob clockwise until the red light labelled "unstabilized" goes on. Then you back off slowly until the red light goes off and the green comes on. The green is marked "stabilized." You only have to do that once and then you can leave the knob in that position forever. If, however, you continue to turn the knob counterclockwise, it will progressively dim the light. More about that later.

When the green light is on it is monitoring the light output continuously and stabilizing it. It is so fast and so accurate that at the end of an enlarging exposure the green goes off and the red goes on for the blink of an eye. It's telling you the light is unstabilized during the length of time it takes for the light to go from on to off!

Until now cold light heads were regulated on the wrong principal; they were regulated on the juice going in but Paul regulates the light coming out. Makes sense; light coming out is what makes the print.

If you turn the stabilizer knob counterclockwise past the point where the green light first comes on, you will gradually dim the light. This is an excellent feature because you can now control your printing time without stopping down the lens. If, for example, your lens is sharpest at $f/8$ but prints too quickly at that aperture so that there is insufficient time to dodge or burn, you just throttle down the light. (No lens is at its best at very small or very large apertures. Two or three stops from wide open is usually best.) The knob positions are marked in letters so you can note in your printing records, "27 sec. $f/11$, D" (the knob position).

If all the stabilizer did was stabilize precisely, it would be spectacular, but the second knob supplies a bonus feature that is as wonderful as the first. In Newsletter 2 I described a method I had devised for adjusting printing exposure to compensate for the dry down characteristics of different papers. It worked fine if you could assume two factors: first, if you reduced the exposure time, say 5%, for a certain paper, the enlarger would have to produce the same intensity of light it did for the first exposure and, second, the print would have to be 'straight', i.e. would require no dodging or burning. The reason the print had to be straight is that even if you could depend on reproducing the base exposure accurately (less the 5% to compensate for dry down), you would go bananas trying to reduce a 15 second burn in the upper right corner by 5%, etc., etc. (That's three quarters of a second by the way.) There would be so much math you'd need a computer.

The second knob solves the problem painlessly and precisely. Here's all you do. Make a print that looks fine and then set the second knob -- the dry down knob -- to minus 5% (in this case) and make another print exactly as before. The 5% light reduction takes care of all the math automatically and, because you don't change your timer, you don't change your printing rhythm. When the second print is dry it will match the wet one exactly. The dry down factor of

any paper I've tested requires a maximum of 8% exposure reduction. The knob goes to 15%. Paul overdesigns.

The stabilizer with the dry down feature will enable photographers to make printing exposures more precise than was heretofore possible. They will be able to do more good work in the darkroom during a shorter period of time. That will leave more time for photography and that's marvelous!

"I congratulate Zone VI and Dr. Horowitz. You have achieved the most important advance in Black and White enlarger technology since the advent of the cold light head."

Ansel Adams (3/21/81)

ZONE VI Newsletter

Number 29, June 1981

Land of bent grass, land of barley,
Land where everything is plentiful,
Where young men sing songs,
And drink ale...

If I had as much as two suits of clothes,
A pair of shoes,
And my fare in my pocket,
I would sail for Uist.

Immigrant Song in Praise of Uist
Collected and translated by Margaret Fay Shaw
Published in her book *Folk Songs and
Folk Lore of South Uist*.

I returned to Scotland for the month of May because there were several areas I had not seen before and I also wanted to go back to several places that I had not the time to explore thoroughly. I flew from Boston to Prestwick and one nice thing about going off-season is that you can conveniently go on a "stand-by" basis where the fare is only \$370.00 round trip; less than half of what the person sitting next to you paid for an "economy" ticket. It seems especially fitting to go to Scotland in a thrifty way.

The new areas that I visited this time were the northeast coast, the Orkney Islands, the north coast and the islands of Lewis and Harris. Especially exciting for me were the exquisite land and seascapes of the northeast in the vicinity of Wick and John O'Groats, "The Ring of Brogar," a group of standing stones in Orkney, and the entire district surrounding the lovely town of Tarbert on the island of Harris. The weather was miserable up in the Orkneys and I spent three days sitting in the car near the stones waiting for the rain to stop. It finally did and though the wind howled the light was marvelous and I worked happily for

over three hours. Orkney is so far North, about the same latitude as Juneau, Alaska or Oslo, Norway, that in May there is light enough to photograph until nine o'clock. Unlike Stonehenge and Avebury in England, these stones stand in a wild setting. There are no fences to mess up your backgrounds and no signs pointing out where to buy a ticket. The effect of the remote setting is more important than these obvious physical-photographic advantages; it is the feeling that you get from being among those ancient mysterious monuments all alone in the wind. After a while the stones seem to be directing the picture taking and you just move easy among them and do what you're told!

Other than the stones, I found Orkney to be rather uninteresting photographically. There are no trees that far North and the land is quite flat and featureless.

I have been attracted to the ancient monuments since the trip to Easter Island and I wanted to see still another group of stones, the ones at Callanish on the Island of Lewis. I took the ferry from the northeast port of Ullapool to Stornoway and drove west about two hours to Callanish. When I got there I was disappointed to see that a group of archeologists and their helpers were excavating among the stones. They had found signs that the area was a burial ground and while I was there they unearthed a beautiful arrowhead only an inch long. A helpful lady who lived nearby suggested that I might like to see another group of stones that was "rather a bother" to get to. So naturally I went. It was the high point of the trip. This group was unspoiled. There were no foot paths among the stones, no fences or structures anywhere in view. It was on a high point of land overlooking a gleaming bay and it was in perfect condition; no fallen or broken stones. The proofs of those negatives look as though the pictures might have been taken 4,000 years ago. Experiences like finding and photographing these stones make you wonder why anyone would want to be anything but a photographer.

From Lewis I went on to Harris where there are magnificent beaches, lush pastoral landscapes, and an exquisite church and

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churchyard at Rodel. While I was there making a photograph a car pulled alongside and stopped. I came out from under the focusing cloth and said hello and the fellow said, "You must be Fred Picker." It was a newsletter subscriber from British Columbia whose name is Ernest Burnett. He figured by my equipment that I was either the best customer Zone VI ever had or that I owned it. He and his wife were on a visit and we found we had a mutual friend, Dr. Harry Thomson, formerly of Vancouver, who attended my workshop in 1977.

After Lewis, I went on to North and South Uist where I had been before. Those two islands were the subject of Paul Strand's book "Tir A Muhrain" (land of bent grass in Gaelic) and I found, as on the earlier trip, that they held more excitement for me than other places in Scotland I had seen. There is a roughness to the country combined with the winds and stormy skies that create an atmosphere I find very beautiful.

During this second trip I exposed about 120 negatives which have been developed and proofed and there seem to be about 30 "keepers" among them. All in all, an enjoyable and productive trip.

During my first trip I had spent quite a bit of time on camera repair. I had received a prototype of the new Model II camera shown in the enclosed pamphlet. I had used it at home for about a month before leaving on the trip. (To buy a camera just before a trip and not check it out is an invitation to disaster.) There were a lot of things I found much improved in this model but there were also several changes I didn't care for. I took it to Scotland last fall anyway. It nearly ruined my trip. One of the things I didn't like was the idiotic tripod set-up. Model I had the best big strong metal tripod mounting plate I had ever seen on a view camera. But the Model II had been "improved." Replacing the steel tripod plate was a cute round wood button at the back of the camera with the tripod screw going up through its middle. There was not enough flat area to give decent contact with the tripod head and the thing was in the wrong place. Because it was at the back of the camera, when you put on an 8" lens the front of that lens was ten inches from the tripod attachment point while the back of the camera was directly above it. Since the lens weighs more than the camera, the assemblage was completely unbalanced.

One fine day in Uist I swung the tripod with the camera mounted on it over my shoulder...and the camera broke right off, little wooden button and all. I have always carried cameras that way; it's practically the only convenient way to carry an 8x10 and surely the easiest way to carry a 4x5. None ever broke off before and my 8x10 Sinar weighs 30 pounds with a big lens on it. The camera landed on the blacktop road and took a good bang acquiring admirable scars on its rear standard. Nothing broke and luckily it landed lens up. But I had to stop photographing for a day while I jury-rigged a messy but serviceable tripod screw arrangement.

The other thing I didn't like on this model was a new "feature," a sliding back. That extra joint where you least want it is a weak spot and turns what should be a tight well-built camera into an old shakey. I just got a couple of bolts before I left home and bolted that movement right out of it. It's a useless movement at best, but if it's ever wanted the same effect can be obtained by swinging the front and back parallel as described in the enclosed supplement.

When I got back I advised the manufacturer that we would not handle the camera unless he made these two construction changes; a 4" square metal tripod base with the mounting screw centered and the rear slide removed. He said the camera would cost more, that he thought we were "wrong" (in spite of the camera falling off the tripod?) but he'd do it. Incidentally, all the other cameras that he ships have the sliding backs and the wooden tripod button. I think the camera as modified for us is excellent. All the fittings are now brass, which looks lovely, and the knobs and controls are bigger, better, and easier to handle. It is also easier to set up because you just pull the front forward instead of raising the front and sliding it into the slots. Jack Welpott, outstanding West Coast photographer who has used a Deardorff for years, bought one to take to Europe and wrote, "I want to express my thanks for making available such a wonderful view camera. It is surely the Stradivarius of view cameras. I know I will use nothing else from now on."

*

The first shipment of 500 stabilizers was sold before they got here but we will have another 500 in September. Of this group, 100 are already sold. The manufacturer has advised that the next

group will be more expensive. If you would like one of the September group, send \$195.00. The price will be about \$250.00 or \$275.00 after these are gone.

I received a letter from Martin Seligson in London who inquired as to the advisability of using the stabilizer in a rather unusual way. He wondered if it wouldn't make sense to locate a knob setting for the various brands of paper so that you would end up with about the same enlarging exposure times at the same (optimum sharpness) lens stop. It sounded good to me so I tried it out with Brilliant, the fastest paper I use, and Ilfomar, the slowest. Setting the knob at it's highest stabilized position for Ilfomar, with a lens stop of $f/11$, I got a 24-second exposure for an 8x10 print from a 4x5 negative. Just fine. That is the eighth strip on my three-second test strip print so it is very refined and that length of time is comfortable for burning and dodging. Using Brilliant with the same negative and f /stop, I tried a few knob positions of lesser brightness and found that I matched the Ilfomar print in terms of density with the knob set at the letter "D." The Ilfomar setting was between "H" and "J." I wrote those in my darkroom book so all I have to do in future for that size print is dial in the letter that goes with the paper. Printing exposures, assuming proper negatives, will come into the 24-second neighborhood. For an 11x14 print the times are doubled so I would have the option of exposing in six-second exposures or opening up to $f/8$ and staying with the three-seconds. I would stay with the optimum f /stop. Thank you, Martin; its a time saver and simplifies the whole darkroom procedure. I intend to set up the other papers as I go along.

*

At Alan Ross' request we are printing the following:

RETRACTION

Dear Fred,

It has come to my attention that some readers may have inferred from my letter published in your Newsletter #28 Supplement that I had "singled-out" Codelite equipment as having intensity "drift." This is not the case; it has been my experience and understanding that "drift" is inherent in the nature of cold-light

tubes in general. I was merely voicing my frustration over a general condition!

Best regards,
Alan

*

A \$150,000.00 motor car...the royal blue Rolls Royce Corniche glided silently from its garage at the first light of dawn. The top was down and the slight breeze stirred the fifty dollar hairdo of the handsome young man behind the wheel. The great car moved slowly through the deserted streets; the eyes of the driver were constantly at search; together, driver and car became a hunting animal. Suddenly the car swung into the curb. Something was out there. The man opened the burled walnut door of the glove compartment and removed a small camera. Across the river and into the trees he ran and suddenly he was photographing. And photographing. Picture after picture of what he thought was a corpse.

Flashback (or forward): He is at his magnificently appointed studio-home-garage-lovenest compound. The door bell rings. Waiting to see him are two nubile teenagers. They exude sunlight and health and hair and teeth and tallness and slimness. They are looking for work. He tells them they should see his agent, which raises at least some doubt as to his masculinity. They talk their way in. In practically no time the three are rolling around in \$500.00 worth of background paper, thereby dispelling any doubts as to his masculinity.

In the "small studio" (50' x 80') two assistants, a stylist, a makeup man, and a creature from another world await him. The creature is 6'4" and her gleaming jet black hair reaches to her waist. So does her milk white skin. She is wearing an essentially frontless red satin gown. The only other thing she is wearing is an expression of icy disdain. She is as perfect as a Grecian Marble.

"Are you dead?" he roars. To the horror of his entourage, he flings this paragon of perfection to the floor and leaps astride her. He yells at her and bounces up and down and carries on like crazy as he fires off shot after shot at her face and upper area from 8" range with his little camera. That does it. She starts to writhe about and cuss and thrash and bare her teeth and her hair whirls

madly through the air. Finally they roll apart, exhausted. "The pictures will be GREAT," he tells her.

Next scene. He's having lunch with his publisher who is pathetically begging for another book. He'll pay anything, give permission for any design just as long as the young man will let him use some of his pictures. Next scene. He's at the "big studio" where a troop of assistants has set up a fashion shot on a set that had to cost \$20,000.00 There are eighteen models waiting for him (at \$4,000.00 per hour for the lot) and a Russian Wolfhound. He walks over to a camera that is set on a tripod, snarls at one of the models to move or not move or smile or not smile, and fires off a salvo. Lots of strobe is happening. Lots of excruciating rock music is happening. Youth is happening. TODAY is happening. *He is a Professional Photographer.*

The busted Dodge Van chugged away from the curb. The windows had been broken by vandals and the slight breeze stirred the hairdo of the young man behind the wheel. He hadn't had a haircut in two years. He, too, is on the hunt at dawn. He is looking for a building at 417 River Street so that he can make a photograph for a failing architectural firm. Aah...there's the building. It's right in the middle of the block and there is no way he can get far enough away from it because of the buildings across the street. He'll have to use a fisheye lens; hardly ideal to record the crisp banality of the structure. (It will come out round.) It is of dark gray brick veneer with windows placed in accord with the city's zoning ordinance and it has a double glass door. These are its most aesthetically exciting features. It faces north so no sunlight glances over its gloomy face. In front of it stands a "dumpster" which is a garbage truck without the truck. The only way he can photograph the building without the dumpster is to get up about six floors in the building across the street so he can photograph over the dumpster. He starts climbing steps, rings a bell on the sixth floor front. He explains his mission to the tenant who slams the door. *He is a Professional Photographer.*

The truth lies somewhere between the extremes described above, but it's a lot closer to the second than the first. There really are people somewhat like the first; Avedon, Penn, Stern, Hiro, Sokolsky, but they are a vanishing breed as TV steals more and more of the advertising dollars. For most, professional photography is quite possibly the least efficient way of making a living yet devised. To begin with, everyone with a camera wants to do it. Not one in a thousand has a chance because here's what it

takes: enormous energy, dawn patrol hours, an accountant's business head, supersalesmanship, a willingness to deal with some of the most annoying clients faced by anyone in any service business...from inept art directors to the mother of the bride; ("My God, look what you've done to her NOSE! You think I'm paying for *that*?")... You need the smoothness of a diplomat, the bill collecting skill of a Mafia captain, the money to "entertain" clients who are not entertaining and, oh yes I almost forgot, you have to come back with the pictures that will satisfy the client no matter how difficult the assignment *every single time*.

That's what it's like. I've done it and I've been successful at it and I can't tell you how lovely it is to be able to write about it in the past tense. What I found most bothersome about commercial photography was how inefficiently your time is used and I don't care how well you organize. For example, I specialized in industrial, architectural, and annual report photography (*Businesses* have money and though you meet a lot of idiots, at least you are spared the mother of the bride.) Another reason I did this kind of work is that it's more difficult so the field is less crowded than "documentary" which is what everyone and his brother wants to do. Besides, there is not much documentary to do now that the huge users, *Life*, *Look*, *Colliers*, etc., are defunct. *Life* is back, but it's a monthly and it's not the *Life* of old.

If you are a commercial photographer you don't photograph much. Here is why: You are out looking for leads and you see a building nearing completion. You take down the name of the architect's firm from the sign and call him for an appointment. He already has a photographer, but if you're as good and cheaper (never forget cheaper) he might take a peek at your work. "What do you pay your photographer?" you ask. He pays \$100.00 a picture to the photography teacher at the local high school. How can you beat *those* credentials? You call the next name on your list; he asks "can you guarantee me the cover of *Architectural Record*." You say something like "I had the cover last month with so and so's Sun Life building so you never know." He says come on over tomorrow at ten. You leave at nine, park your car, wait in the outer office 'til 11:30. He comes out, harried, "let's see your stuff quick, you caught me at a bad time." Let's say you finally get the job to photograph his building. The fee is your regular; no tricks, no jobs on speculation, payment 50% before you start, 50% with the proofs. Fine. That's a tough sale, but any

other arrangement is not...professional. (A professional who doesn't get paid is the ultimate amateur.) It's one o'clock. The day is pretty well shot. You take some proofs to another client and he picks through them (endlessly) deciding which ones he wants you to print, what size, how many, etc. Print them with strong blacks, he says. Absolutely; he's absolutely right (everyone is a photographer.) By the time you are through with him, the day is over. Income zero. Tomorrow you have to take a magazine guy to lunch. Getting your stuff published is the name of the game and a client remains a client as long as you can get his building into print. Sooner or later he'll give you something unphotographable like the one the guy in the Dodge Van had to face and you have two choices; tell him you're ill and suggest your leading competitor do the job or do it yourself and lose the account. You spend an awful lot of time meeting, flattering, selling, billing, collecting, entertaining and retaining clients. You spend a lot of time packing, unpacking, travelling, loading film, processing, phoning, proofing, printing, advertising, etc. You don't spend much time photographing.

What about the guy in the Rolls Royce? He exists only in the movie "Blow-Up" and that movie was the best thing that ever happened to the phony photo schools where "you will learn to be a highly paid professional photographer in only a year or two." (Hiro apprenticed ten years with Avedon before he went off on his own and he had more talent when he began than all the photo school teachers in the US of A combined.) Consider: a top pro can get well over \$1,000.00 a day which is about four times what a Brooks or NYI or Germaine teacher can get in a week, so who's teaching folks how to do it? Guys who can't do it. But "Blow-Up" looked like such a swell life that photo school enrollment zoomed. Nobody stopped to ask where the teachers' Rolls Royces were...

Many young photographers think they can support personal photographic work by doing commercial work. A very few extremely dedicated, highly qualified photographers have been able to do that. Edward Weston (at the poverty level) and, more recently, photographers of the caliber of Alen MacWeeney, Bruce Davidson, Elliott Erwitt, Gary Winogrand, Charles Harbutt and a handful of others. I admire them greatly. For myself, I found that the commercial work was a hindrance to my personal work. The time required to make an adequate living left me without enough time, energy, or desire to go out and do my own work.

The photographers I know who produce large bodies of personal work, with the few exceptions noted above, earn their livings in a variety of ways. Although they may secure some income from grants, the sale of prints, book royalties, teaching workshops, etc, the bulk of their income is provided by employment in a non-photographic field.

*

The best news in quite a while is the return of "Brilliant" paper. The reason we couldn't get any for the past year had to do with labor and other in-plant administrative difficulties. (It comes from France.) Anyway, everything is finally straightened out and we have the paper in stock. It is the same superb material we had last year and we are now assured of a continuous supply.

Many people have shown interest in the pedigree of the paper; it is manufactured to our specifications by the oldest manufacturer of light sensitive materials in the world. The R. Guilleminot Boestflug & Cie. has been in business continuously since 1858.

There is one new property of the paper. When you first turn on the light on a new print in the hypo you may be upset. This is because the paper is a lovely shade of what manufacturers used to call "Ivory." Even after a five minute fix in fresh hypo, you won't have to wonder where the yellow went; it's still there. Put the print in the wash, however, and like magic, the whites turn cold and brilliant. The phenomenon, which I had never seen before, is caused by an outstanding new agent which, I am told, is a sensitizing dye; an organic compound whose formula was developed by Guilleminot to maximize emulsion speed and balance other ingredients of the emulsion.

"Brilliant" is not in our current catalog but is now available to Newsletter Subscriber. I am enclosing a folder which describes it in detail and includes an order form.

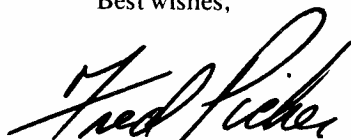
*

Photography publications are addicted to "Tech Tip" columns. Some of the statements made are so inane that it seems the writers will never be able to top this month's inanity next

month. Yet they continually fall to the occasion. We're starting a contest. Send in your candidate; the actual clipping with name and date of the publication. If you pick the loser of the month, you will be the winner. We will print it in the "'How's That Again?' Department" (apologies to *The New Yorker*) and send you 100 sheets of Brilliant paper. (200 sheets if it came from the Zone VI Newsletter.)

This is the kind of thing we are looking for: Reprinted verbatim from Darkroom Magazine, May 1981. "B&W film is more sensitive to bright light - less sensitive to weak light."

Best wishes,

A handwritten signature in black ink, reading "Fred Ficker". The signature is written in a cursive, flowing style with a large, prominent loop at the end of the last name.

ZONE VI Newsletter

Number 30, September 1981

"The deepest and purest photographers now tend to be self-taught; at least they have not as a rule been near any formal photography courses. Any kind of informal access to an established master is the best early training of all".

Walker Evans

You can learn to talk about something by talking about it, but you can only learn to *do* something by doing it. So, when I decided to learn to make portraits, I got a job photographing people two evenings a week. Every Thursday night I would photograph about sixty new recruits of a "modeling and charm" school and on Friday nights I would photograph about thirty veterans who had stuck it out for the eight week course. After a few weeks I was able to photograph sixty people in the time allotted; two hours. I was not careless, the light was better than you would expect, the poses were good, and the overall look of the pictures was pleasant if not profound. I allowed myself just one exposure of each subject as a discipline, an economy, and a way to cut down on darkroom work. I recommend that sort of job to anyone who wants to hone his overall visual skills as well as his specific portrait technique. The job should be easy to get; it pays so poorly that whoever is currently doing it in your town will soon quit! You can avoid total fiscal disaster only by selling some of the aspiring models on the idea of a portfolio.

The value of work under this kind of pressure is in the easy familiarity you soon acquire. After a few dozen portraits my nervousness disappeared, I became easy with my equipment and economical in my movements. I got fast. When photographers dawdle around, the subjects are instantly aware of their indecision and the picture fails. How would you react to a dental surgeon who keeps dropping his instruments?

Constant practice makes you quick and sure, not only in your handling of the tools but in your evaluation of pose and the size and location of the figure in the frame. How big is the figure in the frame? Is it squeezed in or is it so small that it has no relationship to the edges of the picture area? The great photographers pay as much attention to the size and shape of the space between the subject and the picture edge as they do to the subject itself. (Great photographers pay attention to everything!) Look at the spaces adjacent to the "Torso of Neil" by Edward Weston... abstract, beautiful.

You must make other appraisals simultaneously. You evaluate the way the light strikes the subject as he or she changes position relative to the light source. You watch the changes of facial expression. You learn to anticipate the moment of exposure because you have found that if you wait for the moment, it is already too late. Developing these skills will prove beneficial in the future regardless of whether you are making a portrait or photographing a steel plant interior, a landscape, a street scene, or a sports event.

I kept at it for about half a year, during which time I made about 2,000 photographs. In addition to learning a lot about photographing in general and photographing people in particular, I learned about working fast in the darkroom. The concept of the two photographers in the same skin developed; the hawk in the field should be extremely considerate of the mole in the darkroom and provide him with the best possible negative to work with.

I made sure that my 35mm exposures were precise and consistent so that I could settle on one printing exposure in the darkroom. That consistency permitted me to run a whole roll of film through the enlarger giving each print the same exposure. Then I'd develop the prints ten at a time in 16 x 20 trays. At \$1.00 a print you don't fiddle around with a lot of test strips or burning and dodging. I learned to do my "edge burning" at the time the pictures were made by setting up the lighting so that the back-

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ground at the edges would be about one zone lower in reflectance than the area behind the subject's head. I also learned that, for me, Zone VI doesn't have quite enough density in the negative to easily print flesh tones. Since then I have always cheated the flesh tone reading up at least half a stop. If, like me in the early days, you often find yourself dodging flesh tones when making portrait prints, try a little more exposure in the camera. The important thing is not to freeze up; to continuously adjust your technique to force the results you want. If Zone VI delivers convincing flesh tones, fine; but if it doesn't, it's silly to stay with it just because it is traditional or because it works for someone else.

At workshops we stress that to find out what you want to know, you must first frame the question properly. In this instance the proper question is, "Will flesh tone print with a better result for me if I place it on Zone V ½ or on VI or on VI ½ or on VII?" Once you've got the question asked, getting the answer is a snap...four snaps in this case. Just set up your subject and meter him or her precisely and make those four exposures and then print them together; proper proof. One print will be better than the others. The idea takes a little getting used to...that you can make your photographic technique work for you whether or not it works for someone else. Vital to your confidence in the result is the concept of comparison; you can't test a technical or aesthetic procedure in isolation and make a decision based on that single experience. Nor can you "test" anything by comparing the opinions of experts. You must see all the possibilities that are available so you can choose that one which is closest to your heart's desire. I have digressed, as usual, but it is really necessary that a philosophy of dissatisfaction be combined with an organized method of evaluation if improvement is to result. The accepted technique is the starting place but it's not the law. The serious worker takes the trouble to find the answers necessary to tailor the procedures of others to his own expressive needs. End of digression.

The portrait experience was also valuable to me in illustrating what not to do in portraiture. The strict requirement of that job dictated the method of procedure but I never again used the same tools or lighting to make a portrait. Because the pictures were made indoors at night I had no choice but to use artificial lighting. I think that artificial portrait lighting, no matter how well it is handled, is unattractive. The artificial lighting set-up I finally adopted produced better results than other lighting set-ups

I had previously used. It consisted of a single 1,000 Watt quartz light reflected from an umbrella positioned about 45 degrees off the camera axis and about 2½ feet higher than the subject's head. The light stand was about five feet from the subject. I used a large white reflector on the opposite side of the subject to bounce a little light back into the shadow side of the face. The soft kindly lighting gave the subjects freedom to move without creating difficult facial shadows. It is a more honest light than the traditional four light studio set-up consisting of a main light on one side of the camera, a fill light on the other side, a hair light which makes the subject an instant angel, and a background light which completes the illusion by surrounding him with a heavenly glow. In nature there is but one light source; four is a bit difficult to accept. But even the best (simplest) artificial lighting is still artificial. The greatest photographers of people have avoided it; Strand, Stieglitz, Curtis, Sander, Hill, Evans, and many others used the light at hand. Surely many readers will disagree and will name famous studio photographers who are considered great portraitists. *De gustibus...*

In addition to deciding that I was unimpressed with artificial light, I found that for me the 35mm camera was not the best tool. I used it for reasons of convenience and economy. Bad thinking; since then I've learned to use the tool that will do the job better than another tool regardless of any other considerations. The best way is usually the hard way. That's life.

Now I use a view camera for portraits for two reasons. It can produce a print of unsurpassed clarity, sharpness, detail, and range of tone, and the experience of being photographed with a large camera gives the sitter a sense of his importance and impresses him with your respect. He comes to have his portrait made with a heightened sense of self-presentation that is more revealing.

I now make an appointment with the subject because I've found that an appointment suggests an important event for him and also forces me to plan very specifically what I want to do. I don't always end up with my original plan because I am always hoping for that lucky accident that often happens, but I am not comfortable without a fall-back position.

The truth is I'm not that comfortable about making portraits all-together. I always have the feeling that I'm prying, imposing,

taking the person's time, "taking" his picture for my own ends (even if I give him a print). Many photographers share my discomfort. Even at workshops where everyone is a photographer, and therefore much more understanding than the average subject, many people are reluctant to ask each other to pose. Perhaps it is the knowledge of a serious responsibility and the fear of failure. (If you fail with a rock, you need not be embarrassed.) So I have set up a lot of rituals not only to force myself to make portraits but to ease the pain and give myself the best odds against failure. This is pretty much the routine I have adopted.

I plan to arrive at the subject's home about an hour early to give myself time to scout out at least two good locations. What I look for first is a place with good light. Backlight is, for me, the bottom of the barrel. Flare, chalky halos, muddy flesh tones, and gloomy or burned out backgrounds are guaranteed. The next poorest portrait light is overhead sun filtering through leaves or anything else that will cause random shadow blotches on the subject's face. After that comes direct mid-day sunlight. It not only casts eyebrow shadows into eye sockets and nose shadows across mouth and chin, it makes the subject squint. Direct *low* sunlight can be beautiful, however. Early or late in the day, the camera can be placed in a line between the sitter's face and the low sun. If you have placed the camera properly, it will cast its shadows on the subject just below the area being photographed. This "axis light" might be too revealing for some subjects and not everyone can look into the light without squinting, but when it works it is exciting.

My favorite portrait light is open shade. On a gray day everything is in "open shade;" on a sunny day it will be found on the northern side of a building. It is a beautiful easy light. It is easy for the subject because no light source, sun or artificial, is glaring at him. It is an easy light for the photographer because it casts no shadows; he can forget about light and concentrate on the subject. Because extreme high and low reflectances are absent, good full exposures, which place most of the values well up on the film's straight line, can be given. Easy-to-print negatives of fine quality result.

After finding the good light I look for a background that will work compositionally with the subject and indicate, if possible, something about him. Restraint is necessary; it is far better to find a background that whispers rather than one that shouts. The

danger is in being obvious and heavy-handed. Beware the farmer standing in front of a barn holding a pitchfork and the architect with his T-square.

In my opinion, no one ever photographed people better than Strand did. His pictures work. His subjects were usually in open shade and his backgrounds were usually parts of buildings. Why? I think Strand used buildings for several reasons: The linear designs of windows and door frames are relatively simple to work with in terms of placing the subject in a position that will give the picture some compositional solidity, some organization. In addition, the structure behind the subject keeps the background sharp and stops the viewer's eye from wandering into deep space.

When you photograph people in front of their building (their home) they are more relaxed and very often the character of the building is in some way characteristic of the people. In his tour de force multiple portrait, "Family, Luzzara," one of the finest portraits ever made, Strand arranged no less than six people into an exquisitely structured grouping in front of the entrance to their home. The design of the building and the placement of the subjects form a classic composition and the character of the building and the appearance of the subjects reflect the quality of their lives; their dignity, their poverty, their austerity, and their simplicity.

After locating a suitable background in open shade, I set up the camera. I arrange the camera height so that the lens will be at the level of the subject's chin or below. To check the camera height, I take the subject position and look at the lens. If I am about the subject's height and I'm looking down at the lens, fine. If not, I will assume a higher or lower position and adjust the camera height accordingly. Then I place something in the subject position; a chair, a stick, or anything else that I can focus on. I focus on it, then focus on the background, then arrange the focus midway between but slightly favoring the subject position. The way to do that easily with a view camera is to open the lens and focus on the stick. Then position your thumb at the top of the focusing knob and rotate the knob toward you until the background is sharp. See where your thumb has moved to. If it went a half turn, focus back about a quarter turn. Now stop down the lens as you watch the ground glass. When stick and background are sharp, close down one or two stops for good measure. I believe that, when possible, everything in a photograph should be in

focus and, therefore, visually attractive.

The camera must be level for portraits; both left to right and front to back. With the camera below the subject's chin level, you may have to raise the lens a bit if it is a head and shoulders portrait. For a full length portrait, the camera should be much lower...around belt height. If you point a camera up or down to make a portrait, noticeable distortion of the features will result. This is often seen in 35mm work because the photographer stands up, placing the camera at his eye level. He will then have to photograph down at the subject in order to fill the frame. He should get lower and keep the camera level. To keep the camera position low, Dorothea Lange used a Rolleiflex which is held at waist level and looked down into. To achieve that camera position with a 35mm you would have to be on your knees. Also, the Rollei's appearance is much less aggressive than a 35's and the photographer using a Rollei also appears less aggressive because the subject sees only the top of the photographer's head. He doesn't feel so "scrutinized." The Rollei is also very secretive if you want it to be. You can stand facing one way and photograph off to the side by turning the camera. The bigger negative is an advantage as is the better quality of the 120mm film and, finally, the Rollei shutter doesn't sound like a refrigerator door closing.

Strand sometimes attached a big false lens to the side of his 5 x 7 handheld Graflex which, like a Rollei, you look down into. Then he photographed at right angles to the direction he was facing, using the real lens. Many of his portraits of the New York street people and most of the Mexican Portfolio portraits were made that way.

After my camera is set up and focused and the lens stopped down to the proper aperture, I make an exposure reading to set the shutter speed. I go to the subject position, take a reading on my hand, and place the value on Zone VI½. If you are in open shade there will not be any hot highlights to worry about so you need have no concern with blocking a white shirt in sun, etc., which could (does) happen frequently in sunlit situations.

I close the shutter, cock it, insert a film holder and pull the slide. The view camera is prepared at that point to be the fastest (for one exposure) camera in the world! Think of it; you don't have to focus, you don't have to compose, you don't have to crank the film, or take a meter reading, or set the aperture, or set the

shutter, or cock the shutter, or look through a peep-hole. All you have to do is observe the subject and touch off the cable release.

Now I call the subject. He never imagines that with that big camera you are ready to take a picture. He assumes a great deal of focusing and fiddling will occur. As you stand beside the camera discussing body positions, etc., you are ready to get lucky. The end of a long cable release is hidden behind your back. When something says, "Now," you make the exposure. Very often that first unannounced one is the best one.

If the subject is stiff or things just aren't working out, don't keep at it. Change something. The most obvious thing to change is the location. If that doesn't work or is impossible, a change of outfit may be just what a person needs to feel more comfortable. If you have been photographing the subject full-length, try moving in or vice versa. If he is not comfortable standing, seat him. If things are not working right it's because I'm doing something wrong. I change things.

In order to help the subject relax it is important that you encourage him by both word and deed. "That was fine." "Very good, hold that." But then you must take the picture immediately even if you know it's not good. Nothing tightens up a subject more than a photographer who scrutinizes him endlessly but doesn't take the picture; the subject correctly assumes that the photographer is unhappy with what he is looking at. With a view camera you can save your film by pulling and reinserting the slide and making false exposures until the subject is ready to be photographed. A half-dozen nonexposures with lots of compliments in between works wonders. I also find that creating an atmosphere of cooperative effort is very helpful. "*Let's try one with your hands this way.*" "*We should get something really interesting against this background.*" Make him a partner in the making of his picture and he will become interested, involved, and relaxed. Other photographers will determine their own techniques; the above is included mainly to indicate that there are many techniques available that will elicit response from the subject.

And response is what you want. If the subject offers only one expression and assumes only one position you will get only one picture no matter how many exposures you make. What you want is a variety of expression and position so that *you* can respond to something that moves you when it happens. Make things happen.

Everyone will define a strong portrait in his own way. Some will say that it is a penetration into the personality of the subject; some photographers use their subjects to say something about their own convictions. For me, the most successful portraits are those that work on two levels; the subjective, in which the person is himself, specific and unique, and the objective, in which the person projects some universal facet of the human condition. It is not necessary to know or communicate with your subjects to photograph them well. Many of the portraits in "The Family of Man" work strongly in spite of the fact that the photographer could not even speak the subject's language. Nevertheless, a Zulu warrior with tribal markings becomes, in some wonderful way, your brother.

Because famous people are so specific, I find that pictures of them usually lack the element of universality. The viewer becomes so involved with the personality of the famous individual that he can only relate to the image on that level. Commenting on Titian's portrait of Charles V on horseback, Ortega said,

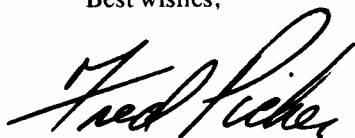
"...we must forget that this is Charles V in person and see instead a portrait...that is, an image, a fiction. The portrayed person and his portrait are two entirely different things; we are interested in either one or the other."

There are many photographers whose work is centered on people. One of the best I know is Alen MacWeeney who is a member of our workshop staff. Alen is a successful commercial photographer who learned much of his trade as Richard Avedon's assistant. His personal work has appeared in *Aperture*, gallery exhibits, and in probably every important American and European publication. His working methods are so different from mine that you might like to know a little about them. He uses both 35mm and a twin lens Rolleiflex for his portraits. He works so smoothly and quietly, carrying on conversations with his subjects, that they don't seem to know or care that he is photographing. He photographed me this past summer and the experience was remarkable. You hardly realize that he is subtly guiding your actions and, incidentally, making pictures as he goes. His enormous skill, developed through thousands of frames, gives the subject ease and confidence. He is so obviously expert that you know he won't hurt you!

Much of Alen's work is involved with the photography of people who are strangers to him. Because his headquarters are in New York City, where he has concentrated on people in public places, he has by necessity learned to work quickly with a small camera without drawing undue attention to himself. His photographs lean more to the documentary style of Cartier-Bresson than to the more formal portraits of Strand or Hill. His style of work does not seem to require the print quality of more formal portraits. Though Alen is a superb printer, 35 is still 35 and the rough look won't go away. But we accept it in his work. Whether we do because we are used to seeing that quality in pictures obviously made on the run or whether pictures of a certain nature actually gain from the treatment, I don't know, but I think Alen's pictures made in the New York subways as well as the Brassai photographs made in the bistros and brothels of Paris would lose much of their vitality and sense of presence if the pictures were not as grainy and gritty and smokey as they are. After all, that is the atmosphere of a subway and a bistro and, I am told, a brothel.

After twenty-nine newsletters you would think I'd get comfortable about writing them. Not this one. This one was the most difficult...which is probably why I put it off to #30. The subject is so elusive. You make ten negatives of a person and you pick the one that...what? Depicts him as most handsome? Shows you as the best photographer? Has the most profound expression? Tells what you believe to be some truth about him? Will make the strongest impression on a viewer? Those questions make portrait photography difficult to do, to look at, and to write about.

Best wishes,

A handwritten signature in black ink, reading "Fred Ficker". The signature is fluid and cursive, with a large, sweeping initial "F" and a long, horizontal stroke extending to the right.

*

The response to our new "'How's That Again?' Department" has been startling. I never realized that there were so many people saying silly things. We got lots of duplicate entries and the most popular goof was my misspelling of "acetic" in the last Newsletter. I spelled it "ascetic" which, it seems, goes better with a monkish existence than it does with the formula for a stop bath. But as Alen MacWeeney says, "A slip of the tongue is not a fault of the mind," so those fellows who found me out didn't win. The winner was spotted by a dozen readers but first contributed by Gary Kable of Charlestown, West Virginia. In an article offering four tips under the heading *Making a Good Negative*, here are the best two: "EXPOSURE. Sufficient exposure should be given to the film to render sufficient densities in both the highlight and shadow areas. Avoid excess exposure. DEVELOPMENT. Proper development of the negative will separate the subject tones to a greater or lesser degree, or the same degree, as desired."

This jewel was found by Gary in the Aug. 81 *American Photographer* in the "Tech Tips" section. A box of paper is on its way Gary, and if you will avoid excess exposure and employ proper development you will be able to separate the subject to a greater or lesser degree, or the same degree as desired.

*

Another beauty that you wouldn't get to see unless you advertised in the photo media arrived at our office...a blurb for the new magazine *Creative Camera*:

"More and more photographers today are into the fine art of picture-making. They're willing to put in all the time and effort it takes to push their talent as far as it will go. They spend hours getting the right angle, waiting for the right moment, even if it means staying up the night to match the results of an Ansel Adams' *Moonrise*."

Those photographers today who are 'into the fine art of picture making' needn't have bothered; the moon rises at dusk.

ZONE VI Newsletter

Newsletter

Number 31, January 1982

In standard photographic practice the negative serves as a positional sketch for the final picture.

Regardless of the care taken in photographing and processing, the characteristic way in which the negative distributes light will in all likelihood need to be modified in making an effective print because the requirements for precision in art are greater than the predictive capabilities of science. . . .

The printer of a photograph linguistically presents to himself the situation he confronts. He can improve the print only to the extent that he can point to and name its shortcomings. A worker without a language to address this logic of visual structure can perform only the most primitive operations based on how he feels about the picture rather than what he sees on the sheet

Alexander Jamison, 1978

"He can improve the print only to the extent that he can point to and name its shortcomings." Some years ago I wrote in a Newsletter about a fellow who came to watch me print. His problem was that he did not know what a print should look like. I then showed him a number of finished prints in the hope that he would get some feeling for how stone or snow or flesh could be excitingly translated into physical and emotional equivalents on paper. Naturally, there is no more chance of teaching the nuances of printing in an hour than of teaching the nuances of cello playing in an hour, but the hope was that he might see something to strive for, something of what is possible. You can easily learn the mechanics of printing by acquiring some routines that are mechanically helpful. But that won't help unless you study a large number of photographs and compare them with your own prints. This is difficult if you have to carry the image home in your mind from a gallery or museum, but is comparatively simple if you have prints you wish to emulate at

hand. Get an assortment of representative prints if you have problems in "pointing to and naming the shortcomings" of your own prints. If you can afford to buy photographs that are not only technically good prints but that are important to you on a deeper level that is wonderful. Whether people who collect photographs are better photographers than those who don't because they have prints to look at or because they care enough about photography to have purchased prints in the first place, I don't know. I suspect a little of each. Second best is to buy good quality prints that may or may not contain elements that move you emotionally but at least exhibit technical excellence. Inexpensive quality prints are available from Best's Studio, Yosemite Park, CA. They are scenes of the Yosemite area photographed by Ansel Adams and printed by Alan Ross. Zone VI also sells an assortment of prints.

Recently I went to New York to see the work of two outstanding photographers; Eugene Atget at the Museum of Modern Art, and Frederick Sommer at the International Center for Photography. Over the years I had seen several original prints of both photographers and once was lucky enough to identify and buy an original Atget platinum from a gallery that didn't know what it was. But I had never seen large bodies of work by the two men. What fascinated me, in addition to the beauty and originality of their work was the affect of the print quality on the power the photographs generated. Sommer first. If you don't know his work, it is easiest to describe by saying that he did it all. There are misty nudes far beyond "romantic," there are "straight" landscapes of the most amazing clarity and delicacy of vision, there are photographs of his paper sculptures and photograms and multiple imagery, all handled with originality, imagination, intensity, taste, and skill. I had seen many Sommer images in reproduction, but the impact of seeing them in the original prints was a powerful new experience. An intensity was achieved in the prints that was only approached by the reproductions. I have never seen better prints. Sommer seems able to carry his imagination to the very limits of drama and good taste without crossing the line into theatrics. Nothing

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sticks out; everything is in precarious balance and everything works together. This level of artistry goes far beyond "learning to print." Sommer is both a consummate photographer and printer. It's the same eye, the same brain, and the same heart that in the field makes the same rejections, acceptances, balances, and responses that are required in the darkroom. Seeing Sommer's photographs presented in prints of such power was both inspiring in the sense that it confirms that you are involved in a medium that contains such possibilities of expression, and discouraging in the knowledge that the road ahead is still so long. The odds that you will run out of gas, or time, or talent are great. But his work indicates what is possible.

The Atget show was different in many ways and similar in others. Atget was a less introspective person than Sommer, more concerned with the outer world. Atget's subject was France and he concentrated on those scenes that he felt were disappearing.

"Often, he told me, he sold prints of his photographs as models to be used by painters too lazy to go on location themselves. More likely, some of them cannily recognized the caliber of Atget's perception, selection *chairoscuro*—and his special soul. One such painter was Maurice Utrillo. In his later potboiling days he purchased and copied with oil colors hundreds of Atget views. Others who owned Atgets were Degas, Picasso, Braque, and Foujita."

"Much has been written about what Atget thought he was doing, and I am of the opinion that words have been put in his mouth about ideas that were not his. He told me he was simply preserving carefully the vanishing world that he loved, and keeping an archive of important classified documents. He was a remarkably simple man, extremely modest. In truth, he was unaware of his achievement. He left 10,000 photographs in hundreds of series, but each individual picture was an essential pearl in the string that was his Paris. And he was making a new statement with every picture, transcending the document and creating poetry that outlived his Paris and will outlive us all."

Excerpted from MEMOIR OF AN ART GALLERY

by Julien Levy, Putnam 1977

Atget's pictures are innocent and loving. At first they might appear to the untrained observer as somewhat primitive. But nothing could be farther from the truth. His purity of vision, his consistent ability to choose not only the most effective camera position but the most revealing moment of exposure is amazing. He made ten thousand photographs under difficult conditions with spartan equipment and he made them without much hope of recognition. Berenice Abbott, whose efforts in Atget's behalf are responsible for the preservation of his work, wrote in "The World of Atget," (Horizon Books), "In a wordly sense, his was a thankless and unrewarding task at best. Yet creative satisfaction must have sustained him, and since he did not live in a vacuum, he probably had some appreciation from a few trusted and tried friends, including, no doubt Madame Atget herself." And, "For Atget the subject was the important thing. The structure, the composition, was dictated by the subject. His compositions, so consistently flawless, were merely a means to clarify and express that subject as clearly as possible. The subject creates its own design and the "style" of the photographer, more dominated by his subject than other visual expressionists, is principally faithfulness to it."

His equipment and techniques were simple. Once he found the most efficient tools and procedures he stuck to them and concentrated on the important aspects of picture making. He wanted a large negative with which he could contact print. The glass plates he used were heavy but effective. Glass lies flatter than film and plates can also provide finer resolution and grain. In many of his photographs he raised the lens to avoid convergence of verticals and in those prints the upper corners are dark; his lens did not have sufficient covering power for such displacement and vignetted the upper corners. He printed by contact in a wooden frame on gold chloride, "printing out" paper, or on platinum or palladium. All of these emulsions provide great delicacy and long scale. He composed his pictures right out to the edges of the plates and the clamps that held the plates in the holders often appear as dark lines extending into the print. He did not use filters and the skies are bare. The printing exposure for these emulsions can take hours and makes local manipulations of the print practically impossible. "... even with a broken plate, with darkened corners with occasional

mis-fires or blurs due to camera motion or unavoidable movement of a person (apparent "carelessness" which can happen to any photographer), not a particle is taken away from that wonderment of seeing "wie am ester Tag"* which characterizes Atget's work," says Abbott.

I agree. The original Atget prints are surely wonderful to see but they are not as essential to the emotional experience as are the original Sommer prints.

How much do you lose from the very best prints in translating them into the very best reproductions? I have some experience with the very best reproduction available. In the production of "The Iceland Portfolio" the halftone negatives were made by Richard Benson. I think that Richard is among the outstanding printers of our time not only in silver, but in platinum, printing out paper, palladium, and other more esoteric materials. He is the designated printer of Paul Strand's negatives, he printed the Atget plates for the show discussed above in those instances where the original prints were missing, he shot the half tones for "Georgia O'Keefe a Portrait" by Alfred Steiglitz which is the photographic book I consider the finest ever made. Not only did Richard—I can't keep calling him that; his name is Chip—make the half-tones for "The Iceland Portfolio," he selected the printer, Meriden Gravure, who also printed the Steiglitz book, and he supervised the printing. He is a nuts and bolts worker who is master of every printing procedure. He chose the paper for The Iceland Portfolio without regard to cost. (He chooses everything without regard to cost.) He chose the ink. He checked all sheets as they came off the press. Because it was a portfolio, each photograph could be printed "one up"—individually—which is a big advantage. In printing a book you print folios—many pages together—and you might want to ink strongly for the best reproduction of one photograph. But by doing that you might be hurting other photographs being printed on the same sheet. Compromise is often necessary for book printing that is not necessary for single image portfolio printing. You might say that all in all we got the best reproductions that talent and money could buy. The reproductions were better than you would have a right to expect, but how close were they to the original prints? How do you put a number on it? Are they half as effective as the prints? I'd have to say no. Landscapes suffer greatly in

*as if on the first day

reproduction. They demand the long scale, the impression of space, and the razor sharp resolution that exists only in the original print. After all, no matter what you do, the basic difference between silver and ink remains; prints are continuous tone while the reproductions are a series of dots.

Why is it so difficult and expensive to acquire good prints of living photographers? In painting or drawing, the original can only be reproduced in weak facsimile. But photographs can easily be reproduced as original prints. You can make an infinite number of prints as good as (or better than!) the "original." This advantage of photographs has often worked against their price in the marketplace, and dealers and photographers have come up with schemes for limiting the number of prints in order to make each print more valuable. There are limited editions of portfolios and of individual prints. Bizarre schemes have included destruction of the negative after a certain number of prints are produced, etc. I feel there is something wrong in all this: it's artificial and fights against a unique attribute of the medium, the availability of any number of "originals." What are the objectives of selling prints? Photographers want to sell prints to keep body and soul together and they want their work seen. Collectors would like to buy good work at reasonable prices.

I've thought of an approach that would be efficient and profitable for the photographer and would provide buyers with his very best work at reasonable prices. It's an outgrowth of the patronage system that painters enjoyed in the 18th and 19th century. Here's how it might work in photography: A group of patrons would commit themselves in advance to take a certain amount of work during the course of a year at a bargain price. Let us assume that a photographer's regular print price is \$500.00. In this patronage plan, twenty five or fifty patrons would, for \$500.00, receive three prints instead of one print. The photographer would choose the three negatives and all patrons would receive the same three prints. The low price is profitable and fair because of the economy of time the photographer would enjoy. Twenty five or fifty prints could be made and toned in a day or two. Another day, with the aid of an assistant, would be sufficient for mounting, spotting, signing, packing, and addressing.

The patron takes a risk in that he might not like all three images but he owns them at a cost of \$166.66 each instead of

\$500.00 each. Fifty patrons would provide twenty thousand dollars gross. With that kind of anticipated income, the photographer might well develop a sense of security which should encourage more of a risk-taking attitude in his photography.

The plan outlined would be wonderful for collectors and Nirvana for photographers. Imagine how Edward Weston, who was delighted to sell the occasional print for five or ten dollars, would have loved it. It has but one problem; how to sell the idea to fifty people. . . .

*

Assuming that a photographer can "point to and name its shortcomings," he can add refinements to a print that will make it a more powerful presentation of the subject. Adding such refinements is often a haphazard procedure. I used to do it the way everyone I knew did it. I'd make a pilot print, look at it, and decide that the upper left should be a little darker. Two areas should be lighter. A little lighter for the area on the left and a lot lighter for the area on the right. So during a twenty one second overall exposure, I'd dodge the left area gently and then switch to the right area and dodge that plenty. Then I'd burn the area that was too light moderately. Let's see . . . that's one gently, one plenty, and one moderately. I'd develop the print and one of two things happened. I'd accept it because I didn't know any better (getting a print you will accept the first try after a pilot print is not a sign of expertise; it is a sign of blindness!) or I'd go back to "improve" it with only the haziest notion of what I did in the first place. That's the standard procedure; sloppy, ineffective and endless.

I finally worked out a controlled procedure that allows me to get directly to the best print I am capable of making without lost motion, lost temper, or wasted paper. I use it for all my printing. Note: It works only if you resist the urge to find a devilishly clever time and paper-saving short cut.

First I make a careful test strip print. See Newsletters #14, and #28. Then I make a pilot print using the enlarging exposure indicated by the test strip print. Usually I will make both the test strip print and the pilot print on at least two brands and/or grades of paper. It is not unusual to test strip a new negative on, say Ilfomar #2, Ilfomar #3, and Brilliant #2. Something in one of the three pilot prints might indicate still another brand

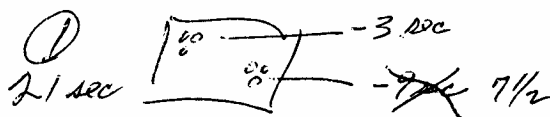
or grade of paper to try. I've often tried four or five different papers to locate the right brand and contrast.

Let's say we're printing the negative previously described and have located an acceptable paper and preliminary exposure. The first refinement to work out is the dodging because dodging is done during the initial exposure. All I know for sure is that the area on the left that I used to dodge "gently" in the old method requires less than my basic exposure. How much less? I look at the test strip but I get no useful information because the area that needs dodging is black in the test strip. It is way over on the left where the exposure was 30 seconds. How about the second area that needs to be lightened? It is on the far right side of the print in the area of the first (three second) strip and it shows blank white. No help there either. It is a rare coincidence in actual practice to find useful exposure information in the test strip print in the area of the photograph where you need it. So what's the answer in this case? I don't know—yet. What's the question? The question is "*How much less than the basic exposure* do I give the two areas to achieve the desired values? How can I find out?" By making several successively lighter prints until I locate the proper exposure times for both areas.

Because 21 seconds, (seven three second exposures) is too much for both areas, I am going to make straight prints at 18 seconds, 15 seconds and 12 seconds. Somewhere in that spread of prints lies the exposure information I need for the areas to be dodged. The 12 second print (-9 seconds) seems right for the "plenty" area and the 18 second print (-3 seconds) looks good for the "moderate" area. Now I make a 21 second print (seven three second exposures) but this time dodging those two areas for three seconds and nine seconds, respectively. It would be unusual to get the two dodged areas right the first time around because a change of any one value in a print changes the appearance of all the other values. I often have to change one or both dodging exposures and maybe even the original 21 second exposure will have to be changed when the effect of the dodging is seen . . . and there is still burning to come! It's very confusing. How can you possibly keep track?

I used to lose track of what I burned and what I dodged and for how long. Here's what I do now. I write a "recipe" on a 5 x 8 notebook page for each print. Circles are my mark for dodging, slash marks mean burning. I draw a separate one inch

sketch of the print for every single operation. The only exception is the original exposure which must show, in addition to the base exposure, the dodging. In this instance it looks like this:



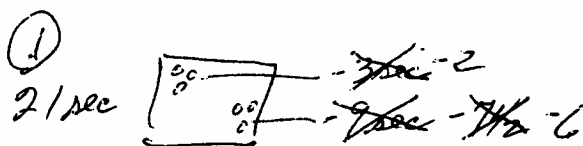
Now I make a print following the recipe; dodging the left side for one burst (-3), then the right side for three bursts (-9). Viewing the developed print, I see that the right side dodging appears excessive. I check the trial print exposed for 18 seconds again and, as before, it indicates that six seconds of dodging won't be enough. The answer is in the middle. No problem. I just cross out the -9 and write -7½. (I can change my timer to 1½ seconds and give two 1½ second bursts as a substitute for one of the seven 3 second exposures). That takes care of step 1 of the recipe; exposure and dodging have been worked out. Let's go on to burning.

The 21 second unmanipulated pilot print showed the upper left corner to be a little weak. How much additional exposure must I give it to get it right? The test strip print is no help because, as usual, the information is not in the area of the test strip print where I want it. The area to be treated is in the 30 second exposure area of the test strip and it is much too dark. What do we know for sure? We know that 21 seconds is not enough and 30 seconds is too much. So I expose whole sheets of paper for 24 seconds and 27 seconds. Assume the 24 seconds exposure looks good for that area. I now sketch step 2 and it looks like this:



Following the growing "recipe" I first expose 21 seconds as directed in step #1, dodging for 7½ seconds and three seconds. Then I add the three second exposure to the upper left as directed in step 2 and develop the print. I can see that the

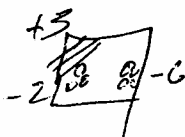
burned area looks fine but it has made the two dodged areas appear lighter by comparison and now they appear slightly weak. I simply alter the recipe by crossing out the dodged numbers in step 1, substituting -2 for the -3 seconds and -6 for the $-7\frac{1}{2}$ seconds. How can six be correct now when it was refused twice before as being insufficient? Because changing any value in a print affects the appearance of every other value. Print values are not absolute; they are relative. The *extent* of apparent changes on other tonalities is subject to so many variables that no formulas are possible. A print must be made, evaluated, adjusted and readjusted as required. Step 1 now looks like this:



Step 2 still looks like this:



Warning: paper (writing paper) is cheap—make a separate sketch for each operation—never do this:

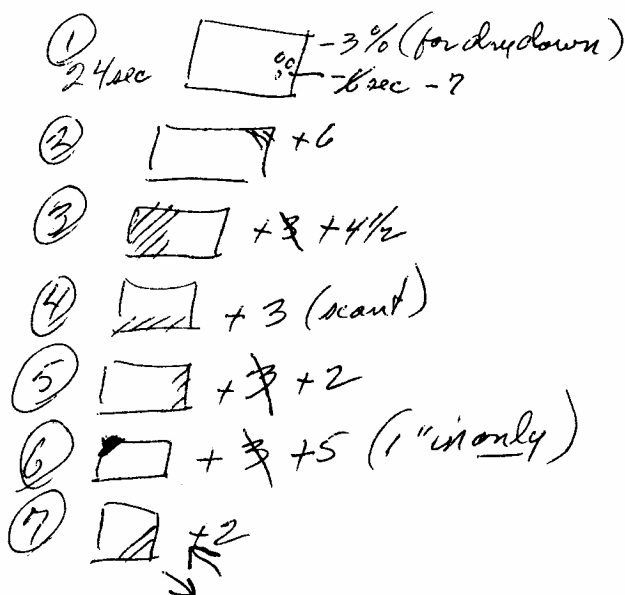


The recipe method works very well. Not only does it prevent you from forgetting a step, it allows you to adjust previous steps substituting new exposure times in light of the way subsequent steps are changing the appearance of those previously accepted print values.

At workshops we go through the making of a print in that way and for the final print I hand the recipe to the nearest student. He or she merely follows it step by step and produces a finished print that is every bit as good as I could make. Try this

method. You'll save much time and paper and make much better prints. I must repeat: it is essential that for every single operation you make a new drawing.

When I'm printing I move a card down over the steps of the recipe as I go. That way I won't miss a step or repeat a step if distracted. The recipe method also removes a lot of strain from a printing session, enabling you to stay sharp longer and enjoy yourself more. Here is an actual finished recipe for a recent print. It will give you an idea of how yours might look:



There is another advantage to my recipe method that may be more important than all the rest: The recipe assures an infinite number of identical prints regardless of the number or intricacy of the steps in the dodging and burning procedures.

Because I prefer not to dodge I usually adjust the basic exposure so that no value in the print is too dark. Then I add exposure to those areas that require darkening. (My pilot prints often look too light overall but the high values are correct). I like this darkening method because it simplifies the procedure;

you need think only in terms of building up weak areas in the same way as painters do. But you are painting with light!

*

Time for our "goof of the month" and we have the first winner of two boxes of paper. Kimberly Torgerson, Assistant Editor of "Darkroom Photography" caught me in a big one. I had attributed the authorship of the first goof we published to her publication. The goof; "B&W film is more sensitive to bright-light—less sensitive to weak or flat light" was actually printed in "American Photographer." Sorry Darkroom, here's your paper Kimberly.

Something worthwhile is going on in Brattleboro that you might like to be involved with. There is a fine non-profit gallery that shows work that the sponsor, Colleen Ahern, believes should be shown. Colleen has decided to sponsor a photography competition to show good work from outside of the area and also to raise needed funds for additional improvement to the gallery. The entry fee for two prints is \$10.00, additional prints entered are \$5.00 each. Deadline is March 1, 1982. The winning print will be purchased by the gallery for \$250.00; all prints will be exhibited and, should the participants wish to sell them, offered for sale. Judges are Lillian Farber and me.

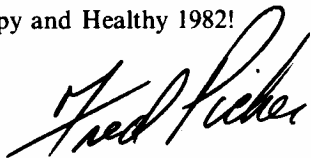
For application forms and further information, write:

Art Works

32 Main Street, Brattleboro Vt. 05301

1981 was an exciting year for us at Zone VI. Largely through your support we have been able to introduce two products that we feel have made a significant contribution to the improvement of print quality—the cold light stabilizer and Brilliant paper. Next year we expect to be testing a prototype meter. I'm going to try to get Paul Horowitz, in the next Newsletter, to tell us exactly how he is progressing. There seems to be a lot of interest in this project.

With best wishes for a Happy and Healthy 1982!





ZONE VI Newsletter

Number 32, May 1982

The heavy odds against finding the desired (and, as it were, ready-made) works of art in the mess and flux of life, as opposed to the serene orderliness of imagined reality, give a special tense dazzle and an atmosphere of tour de force to any photographs that succeed in the search.

The View from Plato's Cave

Janet Malcolm 1976

Lil and I judged a photo contest. In years of looking at photographs, I never had to choose one above another. I looked forward to the experience with trepidation; how do you decide that a glorious landscape is "better" than a marvelous portrait? The whole "contest" idea wants looking into! But it was for a good cause and the result in terms of money raised and publicity achieved and the hanging of a fine show at the Art Works Gallery in Brattleboro made it worthwhile. To you who sent work; thank you from us, from Art Works, and from the people who enjoyed seeing your photographs. Judging was quite a job because nearly two hundred people submitted more than 500 prints.

If you ever want to make friends and influence a judge, a few considerations regarding presentation are in order. The first thing the judge sees, and may have to handle, is the shipping container. There is no contest for the most bothersome. It is the wooden crate with a screwed on cover. Your first impulse is to stamp it, "return to sender" and send it to the post office. Taped cardboard boxes, "photo mailers" and assorted string-wrapped, jury-rigged, falling-apart packages come next in line. Before you know it the place (any place regardless of size) is a mess of corrugated cardboard, foam stuffers, and plastic hailstones. To open 200 packages like that is a chore; to re-pack them is a nightmare. To prejudice a judge positively, pack prints only in a "salon case" which is a strapped fibre shipping case and be sure to enclose return postage and a shipping label.

Possibly the best way to pack the individual prints in the salon case is to put each one in a plastic envelope or interleave them with slip sheets. Any remaining space on top can be filled

in with corrugated sheets. Foam rubber can be glued around the sides of the case to protect the print edges. If you just put the foam in loose the person who re-packs your box probably won't even find the pieces.

You'll impress the judges if your prints are immaculate. Four wrinkled gray things in a busted polycontrast box latticed with masking tape is not a very elegant presentation and unlikely to attract positive attention. Prints must be mounted. Almost without exception, fine photographs are mounted on white doubleweight boards. Prints should be carefully spotted and any black spots removed. For spotting, I use a five-0 brush and #3 Spotone diluted as necessary with distilled water. If it doesn't "take," I add a drop of wetting agent. For black spots, I use an Exacto knife fitted with a sharp #16 blade. The technique of using both of these tools is simple. Take a scrap print or two and practice for an hour or two and find out what happens when you use too much Spotone on the brush or too much pressure on the knife.

The photographs included "screamers," "moaners," "admirables," "wonderfuls" and a "most wonderful" which was also the winner. A screamer is a photograph that forces an involuntary howl from the viewer. They come in many forms. Some screamers are poor copies of great photographs. (There is no such thing as a good copy of a great photograph). Copy screamers include, but are not limited to, shells, peppers, and Yosemite Falls. Set-up still lifes are usually screamers. Symbolic still-lives; a knife and a flower, a child with an octogenarian—also known as a "life and death" or an "Oh Wow"—is always a screamer. Mud cracks are super-screamers.

Screamers almost always have titles. The worst titles drag in a reluctant third party or attribute some attribute to the photograph that it doesn't have. "Homage to Edward Weston" (or even Beethoven) is typical. In this group there was an out of focus snapshot of a barn with snow sticking to it that was entitled something like, "A Picture Minor White Might Have Made". We immediately dubbed it, "The minor White."

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Moving right along from screamers, we come to moaners. A moaner is like a screamer but less intense. A moaner is also called a "so what." A classic moaner appears in one of the photo magazines each month. It is always a single picture made by a staff member who travels the world in search of visual excitement. With unrelenting ferocity he ferrets out the mundane, the obvious, and the facile. No Venetian bridge with gondola is safe from his super-wide lens, no lone junk in Hong Kong harbor is beyond the reach of his telephoto, and no African lion can enjoy a peaceful lunch without the annoying accompaniment of his motor drive.

The next category is "admirable." These are good to look at if you love photographs. An admirable shows the maker's involvement in the thing photographed and in the way he perceives it, contrasted with the way it is or seems to be. Admirables make you think that you would like to meet their makers.

Of the 500 prints received, about seventy fit into the admirable category and we set them aside while we packed up the rest. Because the wall space was sufficient for just fifty prints, we had to cull twenty. The quality was extremely high and some very good ones had to be rejected.

Pictures beyond admirable are wonderful. I sometimes think of them as "dreamers" because, to me, these special pictures often have an ethereal, dreamlike quality. In addition to being well seen, well performed, interesting and properly crafted, wonderful pictures seem to possess another very special quality. This quality goes beyond and beneath what is on the paper. It is another layer, an otherness.

Paul Strand photographed a toadstool and created a portrait of the universe in microcosm. Through his extraordinary vision he brought to our attention what was there for all to see but what only a few could see. Weston was once told that he saw things that others could not. "That's my job," he said.

I've often attempted to isolate the qualities that separate the wonderful pictures from the admirable ones. I've thought about how wonderful pictures are often complicated while appearing simple, often single in purpose and still multi-faceted, often contradictory within themselves. They are like life. Like life, they change with the way they are looked at and in accord with who

is looking at them. They won't stand still to be analyzed. They are quicksilver. They reflect the mood of the sensitive observer just as fire on the hearth, the flow of the river, the easy wind or the sound of music does.

There were about a dozen wonderful photographs that would not have been outclassed in any company and we gave each of them an "honorable mention." The next forty-eight were also excellent and the show was elegant. I wish you could have seen it.

The winning photograph was so outstanding that there was no hesitation in choosing it. I think it chose us! Because photographs deserve to be seen and not explained to death, we are reproducing it here to spare it the indignity of description, commentary or analysis. Please look at the picture. Spend five minutes. Then look again tomorrow. By then you'll either get it or you won't. (When the new students arrive at our workshops they "see" fifty prints in five minutes. At the end of ten days they spend five minutes seeing one print.)

Driving home from the judging I thought about the pictures we had chosen as well as some that we had not. There was one exact copy of one of my pictures! It was the Dummerston Quarry that appears as #31 in the Monograph. The fellow seemed to have found my tripod holes.

I understand that there are people who go to Point Lobos with a Weston book in hand and find his tripod holes, so I appreciate the gesture. But it doesn't work. You can no more copy someone else's photograph by standing in his tracks than you can "create" a Rembrandt by tracing one. Why would any one want to duplicate someone else's picture anyway? One's enough.

I wondered if other people judging photographs are annoyed by photographers who attempt to attract attention by submitting work that bears a superficial resemblance to the judge's work. I was very upset by a letter that said the writer would not send his work; it couldn't win because, "It is not in your style." I admire work that is good regardless of "style," whatever that means. I admire fine photojournalistic work by people such as Eugene Smith, Henri Cartier-Bresson, Werner Bischoff, and Alen MacWeeney. The surreal, manipulated photographs of Jerry Uelsmann, Clarence John Laughlin, and Frederick Sommer excite me. The color work of Marie Cosindas, Rosa-

mond Purcell, and Lucas Samaras I find marvelous. Even if you place Bach (Strand) above all, there is no reason why you can't also respond to Debussy (Atget), and Ellington (Brassai).

The winning photograph was surely not in my "style." It was from a 35mm negative printed too big and the print quality was so-so. None of that mattered. The photograph mattered. And if there had been provision for an award for second place, we would have awarded it for a photograph of a detail of a woman's legs, a bit of skirt, and a soft sky. The picture was very real, very abstract, very moving, and it was in color. The maker understood what color was for and he used it with powerful effect. Many of the color photographs that fail seem to do so because the color is just tacked on gratuitously. It isn't really part of anything. In many photographs the colors fight the forms because it is not always recognized that color creates forms all by itself.

A lot of people who come to our workshops arrive believing that all staff members photograph nothing but rocks and roots in black and white and use no camera smaller than an 8 x 10. Not so. All staff members photograph in color sometimes and all use 35mm sometimes; several use 35mm always. We have nothing against either. Edward Weston said, "I don't care if you make a print on a bath mat as long as it is a good print." I'd say, "what works, works" and if a photograph works in color or works in Polaroid or works in a 16 x 20 print from an instant negative, who cares? I remember seeing the "Photographs of the 60's" exhibit in New York several years ago. Of the hundreds of pictures displayed, the one I would have chosen, had a choice been offered, would have been by the painter-photographer Lucas Samaras. It was soft focus, very abstract, 4 x 5 size, Polaroid, and in color.

I used to do a lot of color work when I was active in commercial photography and those pictures were fine for the purpose, perhaps because they were of subject matter that was usually shown in color. My personal work in color has been less successful. This was made evident in two controlled situations where color and black and white work could be compared. In Easter Island and Iceland I was photographing primarily for books that were to be printed in black and white but each set-up was also photographed in color. The resulting transparencies compared to the black and white prints look like postcardy imitations of the real thing. They are just records and have the

same sort of slick look and empty feeling that is evident in most National Geographic pictures. Could it be that the exotic nature of the subject matter makes it look that way? Maybe it's a combination of subject matter, the quality of materials (or our inability to control them technically) and the inability of most of us to get the colors working in harmony. Some subjects don't seem to get along with color very well. I don't know of any landscape photographer whose color work I find personal and strong and, with the exception of the portraits of Cosindas, I have found no color portraits that I like.

The technical aspects of color have not been addressed in my writings because anyone who has ever developed a roll of film or made a color print knows more about the process than I do. Those who had questions had to search elsewhere for answers. On March 3 I received a letter from Guy Stricherz announcing the opening of a new facility along with a fascinating description of the methods he and Curt Rowell employ. I had long hoped to find someone to handle the color questions that keep coming in but writers of the color articles I read seemed tentative and difficult to follow. Guy's description was lucid, fascinating and obviously expert. We had several talks and I am delighted that Guy and Curt have agreed to be color consultants to Newsletter subscribers. Just send in any questions you might have and those with universal application will be included in the Newsletter. All questions will be answered. Please include a return envelope.

Here's Guy's letter and description:

Dear Fred,

Please find the enclosed information on the CVI dye transfer lab recently opened by my partner Curt Rowell and myself. We are a small but very sophisticated printer making very fine dye transfer's for photographers, dealers, and galleries. In addition, a variety of archival services are offered (we use a Zone VI print washer) as well as a matte dye transfer on Ilford Galerie.

**Sincerely,
Guy Stricherz**

Color Vision Imaging Laboratory
CVI LAB
23 Prince Street, New York, New York 10012
(212) 226-3399

Dye Transfer Color Printing
Guy Stricherz and Curt Rowell

Photographic color prints of extraordinary quality and permanence can be made by the dye transfer process, the oldest and most versatile color print system in existence. Also known as relief imbibition printing, it was first developed in France by L. Didier in 1905, and in the U.S. by F.E. Ives in 1911. This was the first color print system offered by the Eastman Kodak Company, which it marketed in 1934 as Eastman Wash-Off Relief. In the early 1940's Louis Condaux and Robert Speck brought their improved dyes and matrix chemistry to Kodak, which it marketed in 1946 as the Kodak Dye Transfer Process.

The process names are derived from the principles of the printing method which begins by separating the color of an original onto black and white film using red, green and blue filters. The three resulting separation negatives are exposed onto three black and white gelatin-coated film matrices. During development of a matrix the exposed image areas are tanned and made insoluble, while the unexposed gelatin is washed-off in hot water to form a gelatin relief image varying in thickness in proportion to the three-color densities of the original. Imbibition of the colorant by the gelatin occurs when the 3 positive reliefs are immersed in their respective trays of cyan, magenta or yellow dye. The dyes are complementary in color to the separation filters. A print is made by consecutively placing each dyed positive relief in contact with a single sheet of non-light sensitive photographic paper. Each of the three contact impressions is performed manually with a heavy print roller. Contact lasts for under five minutes during which time a pH differential causes the dye to transfer from the gelatin of the positive relief to the mordanted gelatin of the paper support. After three consecutive transfers the result is a full-color dye transfer print made by relief imbibition printing.

In the early 1950's the integral tripack print was marketed with a single support and a triple layer of dye that is formed

in situ during development. Photographic color printmaking became considerably less complex with simpler procedures requiring a fraction of the time and skill. However, dye transfer remains in use because it is a color separation and assembly process which offers the printer vast control over the image contrast and individual colors. The highly saturated dyes provide a full tone-scale, are infinitely variable, and have excellent fade resistance. In addition, a finished set of matrices can be redyed and retransferred to make as many as thirty or more multiple prints.

Dye transfer, or any other color print system, can be evaluated by the following five criteria:

- 1) **COLOR GAMUT.** One objective of all color photographic processes is to simulate human color vision using a trichromatic set of colorants, usually dyes, pigments, or inks. No color process has accomplished this for all perceivable colors; however, the dyes used in dye transfer are capable of producing an exceptionally wide range of highly saturated hues. The gamut of colors is so great that dye transfer prints can be made to exactly match the colors in transparencies and prints made by other processes. The reverse is not true because of the impurities in most trichromatic primaries.
- 2) **TONE SCALE.** Whether in black and white or color, most photographers and printers strive for a full scale of tones from the cleanest white to the deepest possible black. Dye transfer prints have a paper base white, full range of neutral grays, and a deep rich black nearly an entire zone value darker than other color processes. In fact, the maximum 3-color black has a higher density than obtainable in most black and white silver prints. For specific applications, a black dye and matrix can be utilized as a fourth printer.
- 3) **SELECTIVE CONTROL: COLOR AND CONTRAST.** With dye transfer, the color of any object or area in an image can be enhanced, varied, or changed without affecting other colors. Likewise, the contrast of any area can be locally controlled. In addition, the contrast of each color printer can be individually adjusted. For example, yellow can be decreased in highlight areas and increased in shadow areas. This is next to impossible with multi-layered materials. These controls can be exercised in the three phases of the dye transfer process: separation negatives, matrix making, and print rolling.
- 4) **BASE SUPPORT.** A finished color print consists of a small quantity of dye and a base support, which is usually resin-coated for mechanized processing. Until the late 1970's most continuous-tone color systems used a bleached and purified, fiber base paper of high quality and durability. Dye transfer is the only remaining color process using such a sup-

port. An F surface is standard, however, many other B & W photographic papers and surfaces can be used by fixing and mordanting the surface to accept dye.

5) PERMANENCE. Archival quality is basically dependent on three factors: the fade resistance of the dye set, the chemical by-products remaining in the image structure, and the durability of the base support and its capacity for forming a permanent bond with the colorants. The high stability of dye transfer prints is well known to photographers, art dealers, archivists and others concerned about the permanence of photographic images. The only drawback has been a slight tendency of the yellow dye to fade when exposed to bright levels of sunlight for many years. Because it is relatively light and low in contrast yellow fading is much less noticeable than that of cyan or magenta. An improved yellow dye with greater light fastness has recently been made available, possibly making dye transfer the most archival color print system in existence. Additionally, the black and white color separation negatives can be processed and stored to last up to 3000 years by some estimates.

The CVI LAB of New York City is committed to these five criteria for achieving the highest standard of print excellence. A hybrid dye transfer process incorporating an unusually sophisticated color separation and matrix-making method has made available an extremely wide selection of hues and tones, which can be precisely controlled in color, saturation, and brilliance.

The procedure begins by immersing a transparency in oil between glass for perfect flatness and optical clarity. It is then masked and separated into as few as three, and as many as six, color separation negatives. Tri-color highlight masks, and tri-color shadow masks are then made, along with high contrast litho negatives when necessary for local control. As few as nine of these film elements, and usually more, are used in various proportions for combination exposures to three or more positive gelatin matrices.

The ultimate potential of the medium of color photography is realized in the print. The original print is the final manifestation of the photographer's vision and is where the unique photographic properties of the medium are to be found. There exist many color print systems with varying levels of quality and flexibility. Dye transfer is by far the oldest and most complex, yet as a means of photographic image making it is unsurpassed.

Here's a letter from Paul Horowitz regarding his progress on our meter project. He will be back east for good in June and we hope to have a prototype together by fall.

Dear Fred,

I see from your newsletter just arrived that I am invited to report on the status of the spot meter project in the next newsletter! As you know, I've been out here in California's "silicon valley" building electronics to search for microwave signals from intelligent extraterrestrial beings. Being away from my lab at home has kept me from actually constructing any new photographic devices, but I've been able to make measurements on existing meters, and I think I have got a good idea of what the ideal (Zone VI?) spot meter should do, and how to build it. Let me try these ideas out on you and your readers. (Readers: Please forward comments to Fred, pronto; design details will probably be frozen in July.)

What are the problems with existing spot meters? From your own experience you know that there are nonlinearities of as much as two stops at the high and low ends of the scale, usually in the form of a compression of the scale (high values are even higher than the meter indicates, hence overexposed). Furthermore, the calibration varies with temperature, with particular problems in cold weather. Even under ideal conditions, right in the middle of the range, there seem to be variations of as much as a stop from one meter to the next. The most serious non-electronic deficiency I've found is internal reflection and, to a lesser extent, flare.

I've made some tests with the Soligor and Pentax meters, to get an idea how serious these problems are. the meters disagree by about a half stop at EV10, and a stop at EV17. Not so bad, you say. But try doing the measurements with a bright area off to the side, out of the meter's viewfinder. I was getting inconsistent measurements until I realized that one of the meters had a serious internal reflection. When I made some measurements of a backlighted area (EV3) with a lamp in the same room, I found that the meter would sharply swing up to EV11 when the lamp was at 12 o'clock and about 20 degrees out of the field; that's an 8-zone error! There's a similar reflection with other situations, the effects of these reflections are so pervasive that it was difficult to make comparisons between the two meters (more on that soon).

All these problems can be solved, once they're recognized. The flare can be reduced to insignificance with properly designed baffles and lens shade. By using a temperature-compensated PIN diode and a linearizing logarithmic transresistance amplifier configuration, the error can be kept well below $1/5$ stop over the range EV 2-19, holding that accuracy over the full operating temperature range.

Even perfect laboratory accuracy doesn't do you much good if the meter's spectral response doesn't match that of panchromatic film. The reason is obvious—a meter that's calibrated to give correct exposures at noon will overexpose by one or two stops in the redder light of late afternoon, if it uses a red-sensitive (uncompensated silicon, or cadmium sulfide) cell. We will match the meter's response closely to that of Tri-X, say, which is representative of most panchromatic films. What the meter sees will then match the film density you'll get, which means the zones you meter will be the zones you get, in any light color or intensity.

Only when the meter's color response is matched to the film can you actually see the precise effects of any filter. We all know, for example, that the effect of a yellow filter is harsher in the clear high Sierra than on a hazy day in New York City because the light is bluer and, in particular, the shadows are illuminated mostly by blue skylight. With this meter you will be able to measure (and visualize) that effect exactly by just metering through the filter itself. The meter will see what the film sees, and with the same color sensitivity. Zones will meter exactly where they will fall. Such control is not possible now.

Now for the business of "zoning" the meter. Your labels are better than nothing, but they miss the point. It's a nuisance to have to interrupt the process of visualizing to twirl dials and stare at the confusing numbers on the barrel. A spot meter should read directly in zones! Here's how: We'll use a swing-needle, rather than a digital readout (numeric alphabet-soup), with the full EV 2-19 in one range, just like the Pentax or Soligor needle-type meters. But, in addition to the EV calibrations, you will see a ten-zone scale above the needle, right in the viewfinder. Just point the meter, than adjust a dial (with your thumb—one handed) to place the desired zone over the needle. Having placed an object on a zone, you can point the meter here and there and see instantly where other objects fall, directly on the zone scale. You don't have to do mental arithmetic, you can concentrate on visualization, and think about the picture. In

fact, I think we should de-emphasize the EV calibrations by making them small and inconspicuous, or eliminate them entirely. Finally, having placed the values on the zones where you want them, you just read the exposure from a scale on the barrel of the meter.

I tried out this idea when we visited Ansel last week. His suggestions and enthusiasm were both most helpful; what a wonderful man! He liked the idea of a direct zone-reading instrument, and he even wrote a follow-up note, in which he says "As for the exposure meter: it is VERY exciting! . . . it seems to promise a fresh approach. Visualization of the print-to-be is, of course, dependent upon clear visualization AND accurate information."

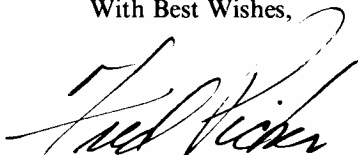
Some other ideas: How about using a lithium battery, which is lightweight, has a ten-year shelf life, and performs well at low temperatures? What about a one-half degree spot for more accuracy (that's the same as the SEI)? Is it useful to have "memory," so the meter will hold the last measurement when you let up on the button? What a pleasure to add the features we think the meter should have without worrying about conventional wisdom, or the constraints that guide the other commercial designs (cost, appearance, marketability).

Best to all,
Paul

*

I like the lithium battery if it does all that, I like the $\frac{1}{2}$ degree spot but I don't think I like the memory (Lil loves it). I think I'd rather move the meter over the subject and watch the needle wander back and forth over the zone scale. Actually, the "memory" is in the thumbwheel which you adjust when you "place" a value. Only trying it out in the field will decide who's right. We'll keep you posted.

With Best Wishes,

A handwritten signature in cursive script, appearing to read "Fred Wicks". The signature is fluid and stylized, with a large loop at the end.

ZONE VI Newsletter

Number 33, September 1982

Anything purely functional will inevitably be restyled
clean out of its original utility.

Murphy's Law, (I think)

"With all controls set on manual (a discrete shutter speed and aperture set), the camera signals manual with a big red M and tells the aperture and shutter speed selected with two steadily glowing LEDs. It also blinks opposite the f-number that should be set if it is indeed different from that chosen. You can eliminate the blinking by changing shutter speed or aperture, if you don't want any biasing. If you do, you know exactly how far away you are from the 'right-on' exposure as selected by the twin centerweighted averaging silicon photocells.

The finder has shutter and aperture scales plus three banks of light-emitting diodes all on the left-hand side. On the far left, out of the picture area (how thoughtful!) is an f-stop scale, ranging from f/1.4 at the bottom to f/22 at the top. Moving right we see a row of green LEDs (11 in all), which light next to the user- or camera-set aperture. LEDs one and 11 are the over/under exposure indicators that pulsate if the f/number is out of range. One notch more to the right brings us to the 13 red shutter-speed-indicating LEDs . . .

We're still not finished with the display. Atop the two rows of red and green LEDs is yet more information, in the form of four letters of the alphabet . . ."

Well, *I'm* "finished with the display" and I've filled in four letters of my choice and invite you to do the same. The above is from an article in Popular Photography in the January, 1980 edition and describes the wonders of a camera called a Fujica. How in the world could you see the world through all those blinking (no pun intended) lights and the numbers and the letters and the big red M? And if you could get past all the blinkers and pulsers you must still face up to the omnipresent glittering vibrating micropism focusing circle which is guaranteed to finally and completely remove any remaining chance you might ever have had to generate the slightest personal affiliation with what (you thought) you wanted to photograph.

How would Edward Weston have responded to such a toy? Imagine his outrage at having to view that magnificent arrangement of kelp, or the pelican wing, or the pepper or the "flame" cypress root surrounded by an array of multi colored blinking signals offering their unsolicited electronic opinions. Perhaps Weston could have photographed through the pyrotechnics — he might have been great enough — but he surely would have hated it. He was involved with "the contemplation of things as they are" and an infernal machine like that won't let you contemplate anything except the glory of its own diodes. My guess is that he would have unceremoniously dumped it into the boiling surf of Point Lobos.

*

This is the 33rd Newsletter and because I've been told that eventually a photography Newsletter should have a bit more about cameras in it, I'll try to get down some thoughts about choosing one. Because there is nothing that generates more strongly opinionated differences between photographers than cameras, prepare to differ!

Perhaps it would be reasonable to start with some strongly opinionated generalities: A camera is a tool. A good one permits you to go about your business (making photographs) without attracting undue attention to itself.

It should be simple. It shouldn't break. Its only designed function should be to make picture making as straightforward as possible.

Murphy's law states in *The Principal Concerning Multi-functional Devices*: "The fewer functions any device is required to perform, the more perfectly it can perform those functions." In engineering, Paul Horowitz tells me, there are factors called "constraints." I think it means that when you tell a designer to do more than one thing, everything else becomes compromised. Suppose we asked Paul to design a meter, accurate over a twenty stop range within 1/10 of a stop. Just as he agreed to do that we mention that, by the way, it should also weigh just two ounces and be less than an inch long, waterproof to a depth of 200 feet, and capable of chilling a six pack on a summer's day. Those are constraints. Most photographic equipment is loaded with sales oriented constraints which are often in the guise of

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“features.” Remember the car that you could drive on land and water? It wasn’t much of a car and it was a terrible boat.

Just as there is no such thing as an all-purpose vehicle, there is no such thing as an all-purpose camera. Let’s take a look at them from the little ones to the big ones and see what they are good at and what they are not good at.

First, Minox and 16 millimeter. Because of their size constraint, they are good for spying, making grain, and convenient carrying.

Next, 35mm. These are the most popular cameras by far. Nearly every photographer owns one no matter what his primary photographic concern is. As a fast-handling high-volume recorder of fleeting moments, 35mm cameras, in the hands of the great journalists like Smith and Cartier-Bresson, have provided some of the most fascinating documents photography has produced. Their greatest attribute is speed and flexibility in use. Their relatively short lenses give great depth of field and the number of exposures that can be made quickly allows the photographer the luxury of “exploring” his subject.

I think 35’s should be small, light, and simple but they are getting bigger, heavier, and more complicated. I have an old Leica M-2 that is OK, but not perfect. It is a bother to load; you have to slide the cartridge in sort of sideways and fish the film tail into a rather inaccessible slot. You have to do those things while holding the removable base plate in your teeth. Because it is a rangefinder, the yellow focusing block is hard to see in some light so I sometimes forget to focus when photographing something exciting. The rangefinder does focus easily in low light and with short lenses, but I don’t like seeing through the viewfinder a larger area than the negative will contain. Even though the area I will get is outlined in yellow, I get confused by seeing extraneous areas. But the Leica has good optics, has never broken, and I trust it. That’s worth a great deal. Alen MacWeeny, who makes his living with 35mm cameras and has been through a lot of them, told me that he thinks the Nikon FM is the best 35 currently available.

With hand cameras it is especially important that the camera be suited to the individual photographer. Because these cameras are handled at the time the exposure is made, a comfortable working arrangement must exist. Several factors should be considered: Does the camera fit you physically? If you have very large or very small hands, certain cameras won’t feel right to you. Does the film winder fall naturally under your thumb? Can

you swing it all the way through to the next frame comfortably? Do you think that you will inadvertently change the aperture setting when you focus? This is a very real problem; the result of thoughtless design. Watch the fellows who can't afford to miss; the wedding photographers. They often tape the f/stop ring.

It is important that a camera fit your temperament. Are you inclined toward simplicity? I like clean, sculpted, beautifully designed things that work quickly, accurately, and always, and are sort of minimal. Other people like Fujicas.

The situations in which the camera is to be used might make a difference in its choice. A complicated camera that might be fine for work around home where there is a repair facility nearby might not be the best one to take on a summit climb in the Himalayas. For that you would want a camera of reliable construction, light weight, and simple operation. A mind made woozy by high altitude, numbing cold and fatigue would probably be incapable of handling the frightening decisions required by "the convenience of a choice of five automatic exposure modes" which will "release your creative potential."

The small differences in the quality of optics of the various 35mm cameras are perhaps less important in their affect on print quality than the manufacturers would have us believe. More important factors affecting print quality from small negatives are camera shake and enlargement ratio. The best lens is helpless against the unsteady hand and the 11 x 14 enlargement.

The 35mm cameras are well suited to the person who prefers to work quickly, make many exposures, and concentrate on the changing visual aspects of the world rather than on its forms, shapes, tonalities, and textures. The things 35mm are not well suited to are those kinds of photographs that require image control. They include architecture, still life, product photography, and photographs of the natural scene. They are a poor choice for any photograph where print quality is important. For most photographers a 35mm is the first camera purchased and many stay with it throughout their photographic careers. Whether that is to their advantage is easily determined by a look at their contact sheets. If there are many images that could have been made with a tripod mounted camera, the photographer was using the wrong tool for those images.

It comes as a surprise to some that their very expensive cameras produce poorer image quality than lower priced

cameras when the lower priced camera is on a tripod. A further improvement in image quality is apparent when you lock up the mirror of reflex cameras, but perhaps the greatest improvement in print quality occurs when the size of the prints is reduced.

A skylight filter, installed permanently to "protect the lens" does an amazing job of image destruction. At about this point in a workshop discussion the group divides into two factions; the theorists and the photographers. The seventy theorists examine their theories to ascertain whether you are right or wrong; the five photographers go to work to find out. They set up a tripod and make one picture of tree branches against the sky with a filter and another picture without. Then they make a picture with the mirror locked up and another without, then they make a picture with the camera hand held. Then they make prints. The "discussion" for them is over. For the theorists, the discussion is never over. It only takes a little work to find out what you want to know. People who really love photography don't mind a little work.

I sometimes receive long letters from photographers asking a question about how something will work when with a lot less effort than it took to write the letter he could have found out. Here's one I got last week. "How many prints can I develop in a gallon of developer?" It depends. What size prints, what kind of developer, what dilution, and most important of all, how much deterioration of quality is "acceptable?" What is acceptable to one photographer will make another slightly ill. One quick test would have taken care of all the variables and answered all the questions. Start off with a gallon of fresh developer. Make a test strip of a typical negative to determine exposure time and then expose three sheets of paper for the chosen time. Put two sheets in a drawer and develop one. Go on with your normal printing. After you have put twenty prints through the developer, develop one of the prints from the drawer. Compare it to the first print. After thirty prints, develop and compare the second print from the drawer. It beats writing letters and the best thing about it is that you know the true answer. That's worth a lot more than someone's opinion.

Once I caught on that most of what I read was either incorrect or didn't apply to my work, I got into the habit of finding out for myself what I had to know to get the job done. The technical knowledge so gained was not only practically useful, but even more important was a bonus I hadn't even figured on; the rather mysterious way that the handling of the materials and the seeing of what actually happens affects your confidence and your approach.

Prints from 2¼ negatives look a little better than prints from 35mm negatives. For one thing, the quality of the film is better. The 120 film has about the same base plus fog density as sheet film; .06 to .08, while 35mm has a density of nearly .30. By the way, roll-your-own bulk 35 is movie film; it is not as good as the cassette film. It is slower and of poorer quality. The base plus fog density of the 120 film makes possible D-Max blacks in the print that can not be achieved with 35mm negatives. The difference in negative size is not great, especially if, like most photographers, you don't print the whole square negative. Most people who buy a 120 camera for the expected improvement in print quality over 35mm are disappointed by the limited extent of the improvement.

The square Rollei and Hasselblad image is difficult for me to compose. Most of the things that I photograph seem to have a very definite vertical or horizontal thrust. And I have trouble holding those boxy camera shapes comfortably. For quite a while I had a 6 x 7 Pentax camera which looks like a large 35mm Pentax. It was heavy, but the shape was good for me and I was comfortable with it. Unfortunately the image quality was poor. Either the optics were inferior or the mirror, which on mine would not lock up, was degrading the image quality. It was very difficult to change film and in a hand camera you want to do that rapidly. I finally swapped it for a car stereo. I warned the fellow that it spent a lot of time in the repair shop, but he said he was handy . . . A 2¼ camera that does not seem to work out well for many is the small view camera. It is about as much trouble to carry and use as a 4 x 5 but has a much smaller groundglass to focus on and a much smaller negative to print with. Assuming a 2¼ x 2¾ negative, you would have about six square inches of film. A 4 x 5 is nearly twenty square inches. Another problem with this format is that the roll film backs are clumsy to use. The good back, which is made by Linhof, is very costly and requires the groundglass to be removed each time an exposure is to be made. These cameras can be used with small sheet film holders too, but that would seem to give you everything you could have had with a 4 x 5 without the image quality. It seems a heavy price to pay in quality for a little weight saving.

Medium format cameras and I don't get along well but one might work well for you. They have been used by many outstanding photographers whose regular format might be larger or smaller. I have often thought that Dorothea Lange's pictures were enhanced by the low camera position that is the trade mark of the Rollei. Alen MacWeeney uses a 35mm usually, but often switches to the Rollei. An occasional user of

twin lens square format is Harry Callahan, and Hasselblads are used by Ansel Adams, Aaron Siskind, and many other outstanding photographers. The point is that each person must find out for himself what cameras will work for him. The cheapest way to do that is to borrow or rent a camera that you think you might like. You can find out more from using a piece of equipment for a half hour than from studying it or its literature all day. That's enough cameras for now; in the next Newsletter I'll review field cameras, monorails, and 8 x 10's.

*

In the last Newsletter I had mentioned that I thought it unnecessary for photographers to imitate the specific work of other photographers and several sharp-eyed readers quickly brought me to task. They had spotted the photograph of a small town in Nova Scotia in my book, "The Fine Print," and remembered a photograph of the same town which first appeared in the Paul Strand retrospective monograph. The Strand book was published in 1972. My picture was made before I had seen his. He entitled the picture, "Village on the Gulf of Saint Lawrence, 1929." I had also made another Strand without knowing it. When I visited Strand in 1974 I brought both photographs with me and he was fascinated by the differences that had occurred in the appearance of the places during the years between our photographs. When I told him the name of the village in Nova Scotia was St. Ann's and the architectural photograph made in Vermont was in Bethel, he was delighted to have them identified and said, "That's Bethel, Hazel, please write it down." Examination of the two Gaspe' photographs reveals that the camera positions were hundreds of yards apart. Strand's picture was made from a much lower position; if you have the two pictures you can see that the church steeple in mine just breaks the horizon. His steeple juts far above. (I climbed a hill). Also, the camera position I used was far to the right and farther back. The choice of lenses appears the same, but because my camera position was farther back, there is more subject area in my photograph. The Bethel pictures are somewhat more alike because the camera position was pretty well dictated. The pictures could only have been made from a bridge.

In the last Newsletter we published a reasonable facsimile of the photograph that we chose as the finest submitted to a competition here in Brattleboro. We received some mail in response and most of those who wrote liked the photograph as much as we did. We were also gratified to receive a brochure from the winning photographer, Philip Dunn, that showed a

more extensive body of work. When you judge a photographer by one photograph there is always the nagging possibility that he might have made just that one lucky photograph, especially in the case of a spontaneous situation such as the one depicted in Dunn's winning picture. Not so in this case. Mr. Dunn is an accomplished photographer without doubt and several of his other pictures might have been the winner. There was one portrait of an elderly woman that was extraordinary. Some readers were puzzled by our choice and wanted the picture "explained." The trouble is that there can be no more reasonable explanation of the emotional qualities in a photograph than there can be of the emotional qualities in a piece of music. It's sort of like describing a person you love in terms of their skeletal structure. What strikes me as strange is the assumption that, "if I don't like it, it's no good." You can only say that about your own work.

*

The last Newsletter requested ideas for our new lightmeter and we got some very good ones. Most people were enthusiastic about the main ideas that we had figured on. They included a $\frac{1}{2}$ degree spot, the zone scale built in to the meter, a needle rather than digital numbers, a good light inside the meter so that the needle is visible under all conditions, small size, rugged construction, light weight, etc. We were somewhat surprised that there were so many requests for the standard EV numbers and have decided on the strength of the response to include them. There were mixed feelings about the long life lithium battery as some people had bad experiences with them. Paul has decided against the lithium battery because they are difficult to locate, expensive, and might blow up! He has decided to use two standard nine volt transistor batteries. Those are the flat ones available in any hardware or drug store.

Paul was here for a few days during our second workshop to go over some design details, visit a bit, and show me his new home made telescope. He was taking it to a home made telescope people's gathering in Springfield, Vermont. It's amazing; he should have little trouble making a meter! Actually, he already has made a remarkable meter. It is dead linear within $1/10$ of an f/stop over the incredible range of 22 stops, shows zero flare, is not yet color compensated, but soon will be, and has a few minor refinements to be worked out. They include: it weighs 35 pounds, is in three pieces which are connected by inch thick cables, it must be operated by a graduate physicist who has received at least six hours of training, it requires a diesel generator, etc. Actually, it is a testing frame for components

and circuitry and the final meter will incorporate some of its features. I call it Meter Mom and its other purpose is to test the real meter. You must start out with something of extreme accuracy or you have no basis for judging the performance of the actual meter. I told Paul that I would like to take it to Scotland with me in September if I could get a camel to carry it.

Paul's test of existing meters has shown some startling results. I had always thought that the only problems were non-linearity of the cells, flare, color sensitivity, and non-alignment of the spot with the area actually metered, but there is another very important problem. Why does green always appear in the print darker than it meters? I thought it did that because the film was comparatively insensitive to green or the meter was overly sensitive to green. Wrong. Paul found the same result; depending on the time of day and other factors, foliage can record on the film as low as a Zone I density when it is placed on Zone V. But he found that it isn't the film's fault; it's the meter that is telling the lie. And it isn't the green color that is upsetting the meter; it is the chlorophyll in the foliage which has an interesting idiosyncrasy. Although everything in nature reflects infra-red light to some extent, foliage can reflect nearly 100 per cent even though it is pretty dark in the visible portion of the light spectrum. The people who design light meters don't worry about these fine points and most meters respond vigorously to infra-red. The problem is that panchromatic film does not respond to infra-red at all. That is why you can underexpose foliage by four Zones in late afternoon; as a matter of fact, in late afternoon you underexpose everything to some extent if you do what your meter tells you. Unfortunately, infra-red reflectance is not a constant and varies with the season, color of the object photographed, color of the sky, time of day, altitude, and everything! My rule until we get our meter; open up one or two stops from metered indications in late afternoon. If you are metering foliage, open up three or four stops.

Gaining confidence, I told Paul that blue appears lighter in the print than it meters and he is now working to find out if that is true (he believes nothing I tell him in spite of overwhelming evidence), and if it is true (it is), whether that is a film or a meter problem. He tells me it doesn't much matter which; when he gets through, the meter will be corrected to take all factors into account and deliver the same negative density to the film regardless of the color of the subject, the color of the light, or the amount of ultra-violet or infra-red light it reflects. The meter will respond to the entire spectrum exactly as film does. An added benefit of this spectral response will be to make application of filter factors, which are always just guesses,

unnecessary. You will simply place the filter over the meter lens and read the new placements of the various elements on the actual zones they will fall on with the meter on the taking lens. You will then set the indicated exposure without applying a factor. It will be taken care of automatically. Readings through filters with existing meters are not indicative of the correct exposure (try foliage through a red filter if you want a surprise); filter factors are still your best bet in spite of the fact that they vary with the time of day, altitude, color of the subject, amount of infra-red and ultra-violet, etc. Only neutral density filters are accurate and Paul advises that even they are slightly yellowish!

Many people have written with concern for the meter's ability for color work. When you are a pro shooting 8 x 10 chromes at about \$12.00 a shot you have a more than casual interest in accurate information regarding exposure and filtration. Recently a meter was developed for color work by Dennis Purcell. Dennis is a friend of Paul's and the husband of Rosamund who is an outstanding photographer and guest lecturer at our workshops. Dennis is also a photographer and was assistant to Ansel Adams for more than a year. He has developed an incident color meter that is extremely sophisticated; it contains a computer and is for the most exacting work. It will probably be used mainly for cinematography and professional work. Expensive! Dennis has spent several years in the development of his meter and surely knows more about metering color than anyone around. He has agreed to share this knowledge with Paul and that will save us a lot of time and effort. There is no reason why the meter can't be adjusted to work as well on color as on black and white.

With Paul and Dennis on the project it is like having Babe Ruth and Ty Cobb on the same team. Now, if this thing doesn't work . . .

An important feature suggested by several readers is a close focus ability. The spot meters you can buy now don't work well for nearby objects. Because the image is out of focus inside the meter, the meter behaves as if it has a fuzzy spot. Paul found that it is impossible to meter an object smaller than three inches square because, if you move in, the spot is out of focus and meters the surrounding area. If you move back, the object gets smaller than the spot. Catch 22! It is our plan that the Zone VI meter will focus like a camera with a lock at infinity like the old Leica lenses had. While we're at it, we will provide a place for corrective lenses for eyeglass wearers who prefer not to wear their glasses while metering.

We got some letters which requested a few added "features."

Some writers don't want a meter that just meters precisely in spite of the fact that at present there is no such thing. They want one that does that and also gives them negative development time instructions and has a viewing filter built in and a framer to tell them which lens to use and some lines aiming here and there to give a few pointers on composition. They would also like it to compensate for bellows extension and reciprocity effects. The negative developing time idea came up so often that perhaps it should be investigated. I think it is all wrong to approach the making of a photograph as though the development of the film was dictated by the number of zones the subject reflects. The decision to increase or decrease the contrast of the subject should not be decided by the meter; it is an aesthetic decision. Suppose you are metering deep woods in a silvery fog. Placing the fog values on VII (I probably would, but that, too, is an aesthetic choice), you find that the darkest tree trunks fall on V. You have a three zone subject. Would the meter say "develop N plus five?" How does the meter know what I want to say about the scene? I want the meter to be a perfect tool; to just give me the facts. I haven't the slightest interest in its aesthetic opinions! With regard to negative development, however, I do think it is important to have access to some information that available meters don't provide. I would like the meter to show several zones below zone zero and above Zone IX. With that information you could see precisely how much subject contrast you are dealing with. Merely knowing, as we do now, that a value falls somewhere above VIII is not enough. We should know what zone it is actually on.

At present we don't know when the meter will be ready. We want it to be as perfect as possible and that means extensive field testing of a prototype. That is sure to indicate many modifications and changes and, my experience has been, every time you change something you mess up something else. You have to wring these things out endlessly before a perfect working hand made prototype is achieved. After that comes drawings, parts lists, deciding on whether we will assemble them or have an assembly house do it, training personnel, etc.

*

During the last twenty five years Polaroid has become an invaluable testing tool for the working professional. Naturally, the best test is to use the material in the camera that will make the final photograph. Users of 4 x 5 cameras can do this easily using a back manufactured by Polaroid and available in any camera store. It slides right into the camera exactly as a film holder does. A fine quality print is ready to view 20 seconds after the exposure is made and the print has been pulled

through the developing rollers. This print is of outstanding quality if the type 52 material is used. The major differences between Polaroid Type 52 and Tri-X is that Polaroid is one or two stops faster, though Tri-X is rated at 320 and Polaroid Type 52 is rated at 400, and Polaroid has a shorter range than Tri-X. There is little or no detail visible in Polaroid below Zone III or above Zone VII. With a Polaroid print the photographer can check composition, lighting, exposure, and he can keep it as a record of the event, the subject, the date, etc.

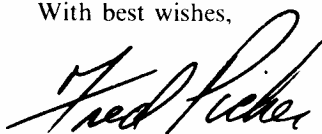
Marty Forscher, who is the undisputed dean of photographic inventors and equipment repairers, has recently accomplished a "break through" (his words) in the field of optics. He has designed a Polaroid back which is available as an accessory for most standard 35mm cameras that have removable backs. These include Nikon, Leicaflex, Canon, and others. It uses all 3¼ x 4¼ pack film and attaches simply to the camera just as its own back does. If you are interested in exploring what sounds like a very useful tool, contact Martin Forscher at Professional Camera Repair, 37 West 47 St, New York City, 10036. Say Hello for me and remind him he owes me a visit during ski season.

*

I just got a wonderful letter from Guy Stricherz and Curt Rowell answering many of the questions that you have sent them regarding the processing of color. I will reproduce it in the next Newsletter. They asked me to forward you their apologies for not answering your questions individually but they have been at it night and day printing the Bruce Davidson show which opens at the International Center of Photography in New York on Sept. 18th. If you have a chance to see the show, I bet you will find it interesting. Bruce is a fine photographer and you may remember his superb documentary, "East 100th Street." I have never seen any of his color work.

I'm leaving for the Outer Hebrides "to test equipment" and will be there until the middle of October . . .

With best wishes,

A handwritten signature in black ink, reading "Fred Fischer". The signature is fluid and cursive, with the first name "Fred" and last name "Fischer" clearly legible.

ZONE VI Newsletter

Number 34, December 1982

I had seen a herd of elephant traveling through dense native forest . . . pacing along as if they had an appointment at the end of the world.

Out of Africa, 1937
Karen Blixen

Man seems to be forever at war with his earth. In this supposedly intelligent and civilized country we meekly accept a Secretary of the Interior who believes environmentalists are a danger to the environment, a director of the Forest Service who believes that forests should be cut even if endangered species are destroyed, and an Environmental Protection Agency Administrator who has delayed 78 air, water and toxic regulations and cancelled forty others since she has come into office. What the bureaucrats have overlooked, our private industries and citizens (sportsmen) are perfectly willing and able to take care of. Every year after deer season I walk over my land looking for the dead and dying does. The area is large and many parts are rough and dense so I never find them all, but last year I found two, last week I found one. The land is posted. The sportsmen trespass and shoot the deer for target practice and let them lay.

I have always been a hopeless romantic about Africa. When I was very small, "Bomba the Jungle Boy" was my hero and I had all of the books. They were yellow, thick, cost a dollar, and there must have been thirty of them. Later, I read and re-read Ernest Hemingway's "The Green Hills of Africa" which contained my favorite, "The Snows of Kilimanjaro," "Hunter" by Hunter, and so many travel books, novels, adventure stories and picture books concerned with the people, the animals, and the land that I can't remember them all. But when I was finally in a position to travel, I consciously avoided the idea of visiting Africa because in Africa the destruction of wildlife and wild habitat is occurring at a pace equal to our own. In 1950 there were 221 million people in Africa. Today there are 484 million. In 2,000 there will be 853

million. There will be no room left in Africa for wild animals. There are only 242 mountain gorillas left. Ivory poaching is reducing the elephant herds by 75,000 per year. In Kenya, rhino have dropped from 20,000 to 900 in the last nine years. There are less than 10,000 rhino left on earth because oil-rich young men in Yemen think that rhino horn dagger handles are macho and old men think ground rhino horn is an aphrodisiac. I had heard that the game parks resembled open air zoos where twenty tourist-laden vans parked around a lone lion having its lunch. No matter how often I have been upset by the ravages man has inflicted on nature, I am still unable to deal gracefully with the reality. I thought it a poor idea to visit Africa; to test the last dream.

But a year ago I read "Sand Rivers" by Peter Matthiessen. He was no stranger to me; I had read his "The Tree Where Man Was Born" (with Elliot Porter), "The Cloud Forest," and "The Snow Leopard." He is a marvelous writer; listen to this: "As tracker and gunbearer, Goa is in the lead, a rifle over his small shoulder with the butt extended toward Brian Nicholson. The gun is a heavy bore .458 of Belgian make, an 'elephant gun,' very useful for stopping large charging animals. Goa holds his free hand far out in front of him, as if extending it to be kissed, fingers pointed down as if to dowse the ground before him for the slightest sign or sound or scent of danger; he moves so lightly that he seems to rise ever so slightly off the ground, at the same time craning his head as if to see over tall grasses that, much of the time, are well above his head."

"Sand Rivers" describes a foot Safari through part of the Selous (Suh-loo) Game Reserve in southern Tanzania (Tan-zuh-knee-uh). (Formerly Tanganyika). In Africa the Selous is known as "the sleeping wilderness." It contains 750,000 large animals including Africa's largest populations of elephant, rhino, buffalo, hippo, crocodile, lion and leopard. It covers 20,000 square miles, which is twice the size of Vermont, and half the size of Iceland. It is the largest tract in Africa in which no human being has rights of settlement or even entry.

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... the situation in the Selous [is] quite different from that in the famous national parks of northern Tanzania, where wildlife could be readily observed not only because that highland country was more open but because many of the animals were hardened to the hideous sounds and outlandish sights and smells associated with the vehicles that turn up stuffed with human masks and glittering lenses all day long. "The parks are all very well in their place, but they are *parks*," he [Brian Nicholson] said. "The Selous is the real Africa."

Sand Rivers,
Peter Matthiessen

The Selous surely seemed to be the Africa to see, but how would you go about it? Permission to enter was nearly impossible to obtain, but just last month I learned that the African Wildlife Leadership Foundation did get permission to take one vehicle into the Selous. As an active supporter of the AWLF, I heard about the trip early enough to reserve a spot. There will be twelve people on the safari, a guide, and a driver-mechanic. We go in mid-January. I'll tell you about it in the next Newsletter.

I am so excited about the African trip that I forgot to write about my third Hebrides trip. I went in October. The weather was mostly awful, the trip was mostly wonderful, and I made a lot of photographs of the standing stones at Callanish. Maybe sometime I'll get back to a more specific description of some interesting photographic problems that arose.

In the last Newsletter there was a discussion of 35mm and roll-film cameras. Before we continue into the larger formats, I would like to mention that I will be taking only 35mm equipment to Africa. I have been advised that I should take a long lens; 300 to 500mm, in order to get full frame photographs of distant animals. But I don't want to take full frame pictures of distant animals! I have seen so many such pictures made by photographers better qualified, better equipped, and more knowledgeable about the habits of game than I, that I have no inclination to bother. The great pictures, such as the ones by John Dominos in "The Cats of Africa," require enormous amounts of time, equipment, personnel, and know-how. What I think I might want to photograph would be the people and the feeling of the land. Not landscapes. I cannot take a large camera because of the slowness of handling, the film loading problems, and the bulk of it. But I wouldn't take a large camera if I could. I want to look; I don't want any projects. Why take a camera at all then? Just because I would feel

naked without one. I'll take a rangefinder Leica M2 with a 35mm lens and a reflex Nikon F with a 105. I'll take 40 rolls of Tri-X; I'll probably use ten.

*

We keep statistics and know that of the more than 1,400 people who have come to our workshops, one third brought 35mm cameras, another third brought 120 cameras, and the last third brought 4 x 5's.

My eyes are no more than scouts . . . the camera's eye may entirely change my original idea, even switch me to different subject matter. So I start out with my mind as free from image as the silver film on which I am to record, and I hope as sensitive. Then, indeed, putting one's head under the focusing cloth is a thrill, just as exciting to me today as when I was a boy. To pivot the camera slowly around watching the image change on the groundglass is a revelation, one becomes a discoverer, seeing a new world through the lens. And finally the complete idea is there, and completely revealed. *One must feel definitely, fully, before the exposure.*

"Composition is the strongest way of seeing"
Edward Weston, 1932.

If I could have but one camera it would be a 4 x 5.

Though we sell very nice ones, I am not going to tell you that one 4 x 5 view camera will take better pictures than another. Maybe it will be simpler and pleasanter to use and nicer to look at, and last longer, but it won't take better pictures. My first camera was the homely cumbersome Calumet with that wobbly curtain rod monorail and it cost \$100.00 new. I called it "old shaky" but it taught me an awful lot of photography. It also taught me to hate cameras with center tilting backs. It is capable, with a fine lens, of making photographs as good as any photographer can make. (As long as there isn't any wind and the photograph doesn't require a wide angle lens.)

I think the view camera is capable of doing more things well than any other camera. That's why professionals, who have to get the job done, use them. They are absolutely required for architecture because you need the rising front to correct for converging verticals and you need the large negative for print quality. Fuzzy

pictures of crooked buildings are not impressive and the precision and texture of architecture is poorly served by small cameras. They are also used extensively for fashion, product, still life, and industrial work.

Other uses for view cameras include landscapes, nature forms, portraiture, and all kinds of commercial and advertising assignments. Close-ups are easily handled by view cameras. Uninformed opinion to the contrary, sheet film negatives are easier to develop than roll film negatives and individual exposures can be developed for varying contrast requirements. The large negative is a pleasure to print and fine print quality is easily attainable.

Developing 8 x 10 or 4 x 5 negatives is easy. If you can handle four or five 8 x 10 prints in a tray, you can handle four or five 8 x 10 negatives. There are a few tricks to it. It is important to use the right tray size and a sufficient quantity of solution. I use "11 x 14" trays. I just measured one; the inside dimensions are actually 13 x 15. The bottoms have deep ribs which make it possible to get my fingers under the negatives. Nothing is more bothersome than trying to develop film or paper in a tray with just a skim of liquid in it. You need some depth to submerge the material. I use a gallon of solution in each tray. I use the same trays and the same amount of solution for 4 x 5 and 8 x 10 negatives. With practice, you can easily handle eight 8 x 10's or sixteen 4 x 5's.

Take a few scrap negatives or remove a few sheets of film from the box (in the dark) and practice agitating them in a gallon of water for fifteen minutes with the lights on. Then fifteen minutes with the lights off. Once I set up some trays and film for a workshop student who said he had trouble developing film. I told him to practice agitating them for 15 minutes and I showed him how. "That's OK," he said, "I've got the idea." He probably didn't want to get his hands wet. He probably never learned. It probably doesn't matter.

The 5 x 7 has fallen into disfavor. Years ago there were more of them than there are now. I don't care much for the long 5 x 7 negative shape which is about the same proportion as the 35mm shape. Strand had a 5 x 7 Graflex and disliked the shape so much that he had metal bars installed across the edges of his camera so that the image area ended up as 5 x 6¼. Why didn't he just mark the groundglass? He didn't want any options; he didn't want to be tempted to print the ends!

The 8 x 10 negative is capable of producing the finest print quality. The negative is four times the size of a 4 x 5. That's the good part. The bad part is that the longer lenses that are required to cover the big negative make certain kinds of work difficult because there isn't much depth of field. The lens required on an 8 x 10 to cover the same image area to be photographed with a 4 x 5 is twice as long. For example, an 8" lens (roughly 210mm) will record the same scene when used on a 4 x 5 as a 16" lens (400mm) will record when used on an 8 x 10. At the same f/stop, the 16" lens will have one half the depth of field of the 8", however. Another example; the shortest lens that will cover an 8 x 10 negative is about a 9" and that is a longer than normal focal length for a 4 x 5. The 9" lens (about a 240mm) on the 8 x 10 covers the same image area as the 4½" lens (about a 120mm) on a 4 x 5 but gives, at the same f/stop, only half the depth of field. The short depth of field and the inability to utilize very short lenses, which are required for certain types of work like architectural interiors, are the weak points of 8 x 10 when compared with 4 x 5. Most people think the weak point of the 8 x 10 is its size and weight; those are the weak points of the photographer! If the picture matters, you don't compromise. You use the equipment you need to use to get the job done. Weston probably weighed 140 wet, but he carried that 8 x 10 until he could no longer carry it.

I use the 8 x 10 winter and summer on all subjects that don't require great depth of sharp focus. Winter is the most miserable time of year to use the most inconvenient of cameras, but enlarged negatives will not resolve the crystalline texture of snow. The grain of enlarged film is actually bigger than crystals of snow (or grains of sand). I don't think that there are many photographers who will put up with the inconvenience of lugging forty pounds of camera gear through hip deep snow to get a picture. Maybe that's why you don't see many quality pictures of snow. But if there is a tool that is the proper one to use to do a superior job, you should work out a way to use that tool. Convenience has nothing to do with it. Wanting the picture enough and wanting to make it as well as it can be made has everything to do with it.

I don't have an 8 x 10 enlarger and have no desire for one. I think the 8 x 10 contact print is exquisite and because I have no enlarging options available, I think that somehow the images I make with that camera are stronger. I often contact print 4 x 5's, too. What you see on the groundglass is what you get, size and all. The only difference between the groundglass image and the print is that the groundglass image is upside down and in color. Contact printing is pure pleasure. It is very easy to achieve superb

quality. Many believe that contact prints are not manipulated; that they are printed straight, like a proof. Not so. You burn and dodge contact prints exactly the same as you do an enlargement. Instead of seeing the projected shadow image on the paper, however, you see the actual negative under the light. It looks about the same. Though contact prints may be made using any available light source, I contact print under the enlarger. The enlarger is convenient to use because you can adjust the light intensity with the f/stops on the lens. If you set the enlarger head at a height that will project about a 16 x 20 area on the baseboard, you will get more even lighting over the image area than you would if you projected a pool of light that barely covers the contact frame. Regular projection speed enlarging paper is fine for contact printing. Some of the old papers were so slow that they could not be conveniently enlarged and only contact printing machinery put out the bright light required to print them in a reasonable amount of time. Assuming that the light is even across the printing frame, the type of light source used for contact printing has no bearing on the appearance of the print. Contact prints are not affected by the Callier effect so a bare bulb, a condenser head, or a cold light head all give identical results. A quick and easy way to see the difference between a cold light print and an enlargement made with a condenser head is to contact print a negative; then enlarge it with the condenser. Compare the tonal gradation. The contact print looks like a cold light print.

Speaking of light sources, Kodak has done an about face and now the literature they pack with sheet film gives developing times based on the use of cold light heads. They say that for condenser enlarger users, experimentation is required to locate the shorter development time required. Condensers have become the stepchild, finally. As far as the recommended developing time is concerned, they now have it a lot closer to correct; they recommend 5½ minutes for cold light. For a long time they recommended 7½ minutes for a condenser! It's hard to understand that. Everybody, you would think, knows that negatives to be printed with condenser heads require shorter development time. If 7½ is too long for cold light, (which it is) it would have been (and certainly was) much too long for a condenser head. I would guess that a more appropriate starting time for developing negatives for condenser enlarging would be in the three or four minute range. That short time might be insufficient for proper agitation so 1-48 dilution might be considered to achieve a longer more comfortable developing time.

The 8 x 10 was the basic camera of Walker Evans, Paul

Strand, Edward Weston, Ansel Adams and many other great photographers. If you have never used one (or a 4 x 5), you probably won't believe this, but those cameras are far easier to use than a hand camera. You can clearly see exactly what you are photographing and the management of the image and its composition are greatly simplified. Although it is easier to make an exposure with a hand camera, it is certainly more difficult to make a good picture with one. People moving up to larger formats are usually delighted by an immediate improvement in their compositions. The improvement comes from being forced to slow down. You have time to think. The improved ability to see the image and make those small adjustments to camera position that are not possible with a hand-held camera are easy with a large camera on a tripod but, perhaps most important of all, is the viewing of the image upside down. People who are not used to such viewing are initially frightened by the idea. After about one day working with a view camera they come to realize that they have discovered the compositional secret weapon!

View cameras come in several types. The field type typified by the Zone VI field cameras and the Deardorff is popular for travel because it folds up into a convenient package. Field cameras can do pretty much what other cameras can do except that some can't handle very long lenses and some can't handle very short lenses. (None can handle both.) The Zone VI has a bellows draw of slightly more than 12" so that the theoretical long lens limit is 12" (300mm). This is only possible at infinity focus, however. Closer focusing, requiring bellows extension, cannot be done with a 12" lens so the practical limit is probably a 10" lens. The advantage of the shorter bellows of the Zone VI is that it is easily useable with short focus lenses and can accommodate lenses as short as 75mm. The long bellows of the Deardorff makes it possible to focus longer lenses but the length and thickness of the bellows combine to pile it up when it is compressed and that makes it impossible to focus short lenses. Recessed lens boards are sometimes suggested but never by anyone who has used one. It is a nasty job to sneak your finger between the lens and the recess to adjust the shutter speed and aperture and, since you can't use a cable release, you usually end up tripping the lens with a stick. Sometimes the wide angle lens photographs the stick! So you can't have everything in a field camera; they are either long or short lens oriented. I prefer the short bellows because you can always crop a print made with a lens that might be a trifle short. There's nothing you can do, however, to accommodate subject matter that is too wide for a long lens.

The monorail type camera with interchangeable bellows is the answer if you need to use both very long and very short lenses. The best ones are the versatile "system" cameras and there are no practical limitations to their abilities. Cameras like the Sinar and Arca have easily interchangeable bellows. In addition to the security of having an extra bellows in case of accident, you can exchange a pleatless bag shaped bellows for the accordin type. This bag bellows is used with short focal length lenses and offers no resistance whatever to camera movements regardless of the focal length of the lens used. The bags can be used with lenses from 65mm to 120mm. For longer lenses or for close ups requiring bellows extensions, you use the accordin bellows. Normal accordin bellows extensions for monorail cameras are 18". Lenses to 12" are therefore easily accommodated and even 14" lenses can be used. Monorail cameras have many accessories available that field cameras don't; there are lens shades, extension rails for very long focus lenses, magnifying image inverting viewing attachments that do away with the need for focusing cloths, filter holders, electronic shutters, etc.

Because of the usefulness of these cameras for certain kinds of work, we worked out a design with the Swiss company, Sinar. It is generally agreed that they build the best. I have used Sinar cameras, 8 x 10 and 4 x 5, for about fifteen years and to date I have not been able to break one. Our design has several unusual features. It has the first depth of field scale I have ever seen on a view camera. Each standard has its own spirit level so that front and back can be precisely aligned parallel and plum regardless of the camera angle. There is another level for left to right orientation. All swings, tilts, slides, rises, and falls have their own clearly marked scales. The camera will accept any of the hundreds of Sinar accessories.

One "feature" that some view cameras have makes them extremely annoying to use. It is the camera back and lens board that pivot horizontally through their centers instead of at their bases. With such a camera, when you tilt the back to get the "far" in focus, the "near" goes out and so you refocus to get the near sharp and then the far goes out and you just keep going back and forth. With a base tilt camera you have one foot on a rock; you "Focus on the Far" and then tilt the back toward you until the near becomes sharp. That's all there is to it. Another difficulty with center tilt cameras occurs when you tilt the back or the lens to focus a short lens. The lower parts of the back or lens board swing toward each other and compress the bellows. You can't

focus. Perhaps the worst problem with center tilt cameras occurs when you have to tilt the back strongly. This configuration occurs if you are photographing a landscape, tide pools, etc., with even a moderately long lens. With the back tilted, you find that you can't get the film holder into the camera past the vertical back support post. What you have to do is "memorize" the angle of the back, tilt the back upright so that you can insert the film holder, pull the slide (you can't get the slide out if the camera back is tilted), and return the back to the position you think it held before. Expose, tilt the back to vertical, insert the slide, withdraw the holder, and worry.

If you don't have one, should you consider a 4 x 5? It's a matter of philosophy as much as it is choosing the proper equipment for a certain use. A large camera usually indicates a certain commitment to photography. It's not a toy; snapshooters don't buy them. It's a serious camera. Does it make you a better photographer? I don't know if any camera can improve your pictures greatly (it will certainly improve your print quality) but I do know that the large format users at the workshops usually bring more thoughtful images. Whether that is because they are more serious about photography to the point of acquiring a more serious camera or whether the camera helps them make better photographs, I don't know. Probably a little of each.

With a 35 or 120, you'll snap a questionable picture for sure. You have the camera in your hand (it's easier to take the picture than not to take it). With a 4 x 5 you'll think more about it. Are you *sure* the picture is good enough? You edit. Do you want the picture badly enough to go back to the car, get camera, holders, rag, and tripod and hike back? This editing process cuts both ways and you have to be sure you are tough enough on yourself not to over edit! (It's too cold, too hot, too wet, too late too this and not enough that and you'll come back for it when the light is better anyway). Be careful. With an 8 x 10 those inconvenience factors are multiplied; be *very* careful. If there is the slightest possibility you're soldiering on the job, get the camera and make the picture. Don't permit yourself to get in bad habits.

You will make more carefully selected and better composed pictures with a larger camera simply because it feels more important. There is nothing frivolous about it. You feel that you are doing something important by just using it; the individual exposure becomes a ritual that you handle with care.

*

Once in a while students ask me "What is the best way to learn to photograph?" I advise them to buy a 4 x 5 camera, the best damn tripod in the world, a 210 Symmar lens, a focusing cloth, a Polaroid back, a few holders, lots of Polaroid type 52 film and 25 sheets of Tri-X. They should also buy the books of the photographers whose work they admire. No technical books to confuse them. They should learn the hard part first. They should go out into the world and make Polaroid pictures. And remake them. They should spend one year finding out what they want to say, how the camera can say it, how to penetrate a subject and explore it visually and emotionally. The instant feedback of seeing the print and then changing the camera position, changing the exposure, changing the lighting direction relative to the camera, seeing what kind of light has what effect on the subject, changing the position of a subject, remaking a photograph until at last you really have it is more valuable than a lifetime of aimless snapping. The holders and the Tri-X film are because the students are only human. After a while a student may make an outstanding image on the Polaroid; an image that he would like to have a negative of. He can make an exposure on the Tri-X, develop it, and put the negative away until next year, or the year after. That is when he gets a darkroom and by then, if he worked hard and has some talent, he may have a dozen negatives worth printing. That's about six more than I had and of the six, I would say that two are decent pictures by my standards of today.

How many people have followed this logical advice? None, so far as I know, but I am not without hope. (I'm *sure* it would work!)

I hope you have a happy holiday and a marvelous New Year.

A handwritten signature in cursive script, reading "Fred Fisher". The signature is fluid and elegant, with a large, sweeping initial "F".

ZONE VI Newsletter

Number 35, May 1983

The wild creatures I had come to Africa to see are exhilarating in their multitudes and colors, and I imagined for a time that this glimpse of the earth's morning might account for the anticipation that I felt, the sense of origins, of innocence and mystery, like a marvelous childhood faculty restored. Perhaps it is the consciousness that here in Africa, south of the Sahara, our kind was born. . . . Something has happened here, is happening, will happen—whole landscapes seem alert.

Peter Mathiessen

The Tree Where Man Was Born

A banshee scream originating four inches from my ear shredded the African night. Blasted from sleep, I swung my elbow hard into the horribly contorted face beside me. Its mother was upon me in an instant. "How can you strike a child?" she screamed. "There are several techniques," I mumbled. She signalled the stewardess and demanded that I be put off the plane but we were 38,000 feet over Egypt and the stewardess informed her that it was illegal and poor public relations and then she mercifully found me a seat elsewhere.

We had been flying for sixteen hours, eight from New York to Amsterdam and eight from Amsterdam to near Cairo. We had about five hours more to Dar es Salaam. Arriving somewhat groggy, we transferred to a hotel for a bit of rest and rehabilitation and after lunch we met Dr. Alan Rogers. Alan is a professor of zoology at the University of Dar es Salaam but he was able to take some time off and would accompany us on the trip. He was raised in Kenya, took his degree in England, and lived eleven years on the Selous Reserve where he acted first as zoologist and then as warden. Alan is one of the brightest and funniest people I ever met and he served as our guide on this trip. He was excited to be returning to the Selous and his excitement was contagious.

On the following day we left for the 180-mile trip south to the Selous. The dirt road was in such poor condition that most of the time we drove beside it. That evening when we arrived at the Selous we found a wonderland; an Eden. In the hour of light that remained we saw herds of impala and wildebeeste, elephants, baboons, zebras, and giraffes. The following morning we saw all of them again and hippos, crocodiles, lions, cape buffalo, eland, greater kudu, and birds beyond counting and beyond description. We kept on the move every day and set up our tent camp in a different location every night. Living conditions were basic with no refrigeration, no "facilities," and no fresh food except some fruit and vegetables we had brought. There was plenty of heat and plenty of bugs of startling size, vigor and anger. We slept on the ground and bathed in the rivers and sloughs. Because all the waterways are inhabited by hippos, an animal not famous for fastidious personal habits, the water has the appearance and nearly the consistency of chocolate pudding but when you're that hot, you compromise. Our drinking water, which we brought in with us, was at about 100 degrees.

The Selous is low and hot and it is tsetse fly country. Few visitors go there and that is one of the reasons it has stayed so wonderfully wild. Few natives go there because of the thin dusty soil, the tsetse flies that make the area uninhabitable for cattle, and its inaccessibility. In two weeks we didn't see a sign or even a footprint of man. I would happily go back for those wonderful moments that make any discomfort fade into insignificance. I remember especially one golden evening strolling through a long green valley and coming upon a family group of fourteen elephants. I sat on a log and watched them for an hour. It must have looked just this way 50,000 years before.

I have been informed by my good editor that I am not allowed to turn what is supposed to be a photographic Newsletter into a copy of "Travel and Leisure" so here are some photographic observations related to some aspects of the trip:

Before leaving for Africa I decided to gain some experience in technique and some confidence in the camera I would be using on the game that I would be photographing. I also had a question about lenses I wanted answered. The only photography I had done that seemed similar to the work that I envisioned doing in Africa was photographing professional football. The equipment I finally settled on for photographing the New York Giants was regarded as archaic by the other photographers working the sidelines, but my pictures came out well enough. I used a Nikon

and 105mm lens. They used lenses from 300mm on up. I could stop fast action better than they could because I could use a larger lens opening and therefore higher shutter speeds; my lens would open to $f/2.8$ and theirs would usually open only to $f/4$. I could include a larger image area and enjoy a greater depth of field, which often made ordinary pictures interesting, because the good stuff often happens away from the center of the play, away from the focus of the photographer or the eyes of the referee!

Although their longer lenses got a larger image on the film, their image resolution was not as good because the longer the lens the poorer the quality. The effects of camera shake are magnified by longer lenses and the short depth of field that goes with long lenses made their pictures out of focus more often than mine in fast moving situations. A 105mm lens has about twice the depth of field at a given aperture as a 200mm lens or, put another way, you can open up a stop and still get the same depth of field at twice the shutter speed with a 105 as you can with a 200. Although the shorter lens worked out better for me in football, and though photographing animals might seem to be an apparently similar situation, it might produce different results for unknown reasons. Stop talking and find out what happens.

I borrowed a 200mm lens to compare with my 105. We have enough African animal equivalents here in Vermont to practice on. We have cape buffalo beef cattle, impala goats, hyena sheep, elephant and rhino draft horses, and sable antelope and eland and greater kudu cows. There are zebra saddle horses and cheeta golden retrievers and plenty of equivalent birds even if we don't have any with the ten-foot wing span of a saddle-bill stork. I took my old but freshly overhauled and cleaned Nikon F camera and both lenses and went forth. The camera has no meter and the terrible split image focusing screen with which these cameras come equipped has been replaced long ago with a groundglass screen with a fresnel spot in the center. No one can convince me that they don't put in the worst possible screen on purpose so that they can immediately sell you a replacement. They get you by the accessories.

I have also installed an optical correction eyepiece so that I can focus without using eye glasses. Nikons, I have been told, focus at an equivalent distance or aerial image or something of about two and a half feet from the camera so the optical correction, if required, is for that distance. At any rate, you just snap in the various Nikon correction eyepieces in a camera store until you find the one that allows you to focus sharply. My film was Tri-X

as usual. There is no film I know that will approach it for smooth gradation and a feeling of light, volume and substance. It does not have the finer grain or greater sharpness of slower films but you can't have everything and I am willing to give up some sharpness for the atmosphere of a Tri-X print. And for this kind of work you need the speed. With sheet film enlargements are moderate so, regardless of the film used, there is no visible grain or apparent loss of sharpness. A 35mm enlarged eight times linear makes about an 8x10 print; a 4x5 enlarged eight times linear makes a 32x40 print.

In an attempt to simulate imagined conditions, I photographed individual animals and groups and birds through the car window with both lenses and I photographed them on foot with both lenses. I photographed them from as close as twenty-five feet and as far as infinity focus with both lenses and finally brought back two rolls of film after a long day's boring work. Printing random pairs of the same animals photographed from the same camera position with both lenses showed that, in every case, in spite of the fact that I had to enlarge the 105mm prints more in order to achieve the same size animal image on both prints, the 105 pictures were sharper and, at the same aperture, the depth of field was greater. And the greater subject area that the 105 covers might give me the opportunity to do a little after-the-fact composing in the darkroom that I might not have the time or composure to achieve in the field if I should find myself twenty feet from three or four real lions.

A review of the proof sheets provided an added bonus of information; they revealed that I am not immune from a failing common to 35mm photographers. I often allowed the focusing spot in the viewfinder to draw the subject into the middle of the screen. I made a mental note of the danger and determined to try to compose carefully. It is not easy with 35mm because you can only focus in the middle of the screen and you often have to expose quickly. You tend to forget to arrange the image in the frame to best effect. I also decided that I would pre-focus whenever possible to simplify my procedure further.

When I got to Africa with the 105mm I saw that I was a minority of one in terms of equipment, technique, and light sensitive material. The others brought slow or medium speed color film. They all brought long lenses. I mean l-o-n-g lenses. There was a lady with a spanking new and untried Leicaflex camera with a 500mm mirror lens about the size and shape and photographic usefulness of a football. The man in the camera store had

assured her that it would be “just the thing for Africa.” He should have said, “instead of Africa” because if she hadn’t bought it she would have had enough money for another trip. Though she had never used the outfit, it cost so much and looked so impressive that she was sure it would take outstanding pictures. The maximum lens opening of that 500mm was $f/8$. The man in the camera store had told her to use Kodachrome. It has a rating of ASA 25. Translated, that meant that in bright sunlight she would be exposing at $f/8$ at $1/125$ sec. But animals don’t do a lot of standing around in bright sunlight in 100 degree heat waiting to have their pictures taken; they prefer shade. In shade, $1/125$ at $f/8$ becomes $1/30$ at $f/8$. Aiming and focusing a 500mm lens at a moving subject while standing in a moving truck and hand holding for $1/30$ of a second would appear to be a bit of a chore.

The others had similar, if less dramatic, equipment. The many 300mm zoom lenses were terrors. They are about the size and weight of a field howitzer, they have inferior optics and, under the pressure of this kind of photography, you have more things to worry about than adjusting the zoom. Users of these lenses suffer from the same depth of field problems and slow shutter speed problems that plagued the lady with the 500mm $f/8$ but not to the same degree because these lenses are 300mm and open to $f/4$ or $f/5.6$. In most instances the animals departed during the focusing and zooming phases; in a few instances they stayed until the beginning of the metering phase.

I used my meter only to establish a “key exposure.” (See Newsletter #24.) It showed that the light was just like Vermont except one stop brighter. (Without sun glasses, you squint in Africa.) That meant that I could set my shutter speed at $1/500$ and leave it there. I did. I set my lens at $f/16$ and that was my bright sun exposure. I set my focus at sixty feet so everything would be in focus from thirty feet to infinity at $f/16$. As I approached an animal all I had to do was decide whether he was in bright sun (don’t do anything; just aim the camera and take the picture), broken shade (open up one click and take the picture), or full shade (open up two clicks and take the picture).

After finishing a series of exposures, I always reset the f /stop to $f/16$. When the next photographic opportunity appeared I had only one thing to do and I could do it without looking; just open the lens either one or two stops if necessary. By the time the others had decided whether they preferred “aperture preferred” or “shutter preferred” or “manual preferred,” centered the needle, zoomed the zoom, and focussed the focus the animal was either

gone or was going. In dawn or evening light I was the only one who could photograph at all and I was still exposing at 1/500 sec. but at those times using a lens opening as large as f/4.

One thing I had to watch out for was the weak detents of the f/stop ring. It's such a poor design on most 35mm cameras that you often turn the f/stop ring when you focus. I am going to see if Marty Forscher can either strengthen the f/stop detents so that they click in with authority or, better yet, install a button that has to be depressed before an f/stop can be changed. The same sloppy setup exists on many meters; they have no positive lock on the ASA setting ring and many a photographer has found to his dismay that he has exposed a roll of Kodachrome at ASA 1200. On a meter, I tape the ASA ring.

The other people on the trip always used the very last exposure on a roll of film. If they had three exposures left on a roll they would leave the roll in the camera until the next photographic opportunity appeared. Naturally they would run out of film at exactly the wrong time so there was always a film rewinding, film loading panic going on. They did it again and again. I asked someone why he didn't change film when he had got down to the last ten shots on the roll so that he would be prepared with 36 exposures for the next opportunity. He said he didn't want to waste film and wasn't sure he had enough anyway. He had planned to replenish his supply in Arusha but there was no film there, he said. (If there had been, it would probably have been stored at 100 degrees for four years and cost \$15.00 a roll.) Photographers who get the job done are, as they say in Vermont, "on top of it." It would be the photographic equivalent of having two winters' worth of wood drying in the shed before June. Experienced photographers are always overloaded with whatever they might possibly break or run out of. A professional photographing a cereal box for an advertisement wouldn't have less than two dozen boxes on hand so that he can choose the "best" one and perhaps spoil half a dozen while experimenting with effects. Can you imagine a National Geographic photographer arriving in Tibet without twice as much film as he could possibly use or carrying a camera with three unexposed frames in it?

The above description of equipment, materials, and technique employed is different from the generally recommended procedures for game photography, but results show that they worked and when I go back to Africa I will do everything exactly the same. The pictures look fine. Well, not really. They look technically fine, but they do not begin to recreate the atmosphere of the

experience. Seeing a lion lazing in short grass, perhaps the same one whose distant roaring disturbed your sleep the previous night, feeling the same sun on your back, hearing him breathe, smelling him, facing his gaze, standing on his ground (in the Selous you are allowed to leave the vehicle if you are in the company of an armed game scout), provides a far deeper experience than looking at a picture of him. As I wrote in the last Newsletter, I suspected that this would be true because I had seen few animal pictures that seemed more than records. The pictures will, however, recall a marvelous experience and even though they are not important as personal work, I am glad I have them.

I was overwhelmed by Africa and I plan to return next winter. One evening, Rick Thompson, who ran the trip with unflappable good spirits and remarkable skill, worked out a wonderful itinerary; a dream Safari. The dates are still tentative, but February 1984 seems a good time, two weeks a good length. The costs are stiff because it's a long way and expenses for food and fuel in Tanzania are breathtaking; warm no-name beer complete with floating unmentionables is only available in cities and costs \$3.50 a bottle and petrol is \$6.00 a gallon. The complete cost of the trip including round trip air fare from N.Y. will be about \$3,500.00. If we can assemble our own group, we can choose our own itinerary which will be far better than the usual tourist routes. The trip will originate in Arusha and include the Serengeti plains and the Ngorongoro crater. If you think you might like to come, drop me a note and I'll keep you informed as plans progress. My home address is Dummerston, Vermont 05346.

COLOR DIARY

Summer 1982

Dear Fred,

The response to our article on "Dye Transfer Color Printing" in the May Zone VI Newsletter has been much greater than expected; unfortunately, we cannot reply directly to all the excellent questions as we have been busy seven days a week printing the Bruce Davidson/Subway exhibition opening at the International Center of Photography in New York City on the 18th of September, 1982. Each finished print requires from 5 to 20 hours work! However, we hope to cover some questions in addition to clarifying some misunderstandings about the nature and practice of color photography.

Tri-Color Theory. The ultimate objective of color photography has classically been to reproduce what is seen by the human eye. To describe the nature of his trichromatic theory of color vision to the Royal Society in 1861, the English physicist, James Clerk-Maxwell, devised a tri-color photographic projection system to produce a full-color image, containing all colors through admixture. Three B & W negatives were made in a camera through red, green and blue filters. These were contacted to make positives which were each placed in separate projectors with the corresponding red, green and blue filters over their lenses. The three images were superimposed to produce “natural” color. Whether additive or subtractive, all color photographic processes are based on this theory. In press process color, the fourth black printer is merely used to compensate for the inferior black produced by the three colors overprinted.

Color Deficiencies. The “ideal” three-color system (of which there are none) assumes the use of three pure colorants, pigments or dyes, each of which reflects all of its own color and absorbs all of its complement. The common deficiencies of all three-color sets is said to be the unwanted absorption of green and a little blue light by the cyan colorant, and the unwanted absorption of blue light by the magenta colorant. They are said to be contaminated with their opposite colors. Basically, this means reds that are too orange, and greens and blues that often appear dirty.

In his book *Color Vision: An Historical Introduction*, Gerald Wasserman of Purdue University finds the shortcomings of tri-color processes not so much in the deficiencies of the three primaries, but in the beast itself, the theory underlying it.

Four and five primary color systems have been proposed and used in limited practice in the past; though unpractical and cumbersome, they make available a wider range of clean colors, rendered more faithful to the original.

Color Correction. B & W silver and color dye masks are used in many photographic processes to correct the most obvious color discrepancies from the original. These are usually most apparent in psychological reference colors: Colors for which we have a memory, e.g. skin tones, green grass, blue skies, etc.

Editor’s note: I can’t resist butting in here to mention that “psychological reference colors” (colors for which we have a memory) might be thought of in black and white work as “values you insist on” for Zone System placements. They

would surely include flesh tones and other values of known substances such as snow, but sky or grass or rock, though of a specific color, could be any of a number of tones and would therefore not be a “psychological reference color” (or tone) in black and white work.

Silver masking, as used in dye transfer and graphic arts processes, can also be used with other photographic materials not only to correct color impurities, but also to correct color shifts caused by the incorrect color temperature of the light or the wrong film for the color temperature. However, only a few labs will make a masked “C-print” or Cibachrome as the techniques are rather arcane and complex. More on this later.

Originals for Dye Transfer. The best original and purest approach to dye transfer would be to make B & W separation negatives in the camera through Wratten tri-color filters. These would be used to make second generation positive matrices for rolling the print. This is obviously limited to inanimate subjects and requires using the same film holder with a view camera so as to assure accurate alignment and registration. Until the introduction of Kodachrome sheet film in the 1940’s the one-shot camera was used to make three separations simultaneously by using a beam splitter behind the lens and three film planes with filters in front of each holder. However, they are quite bulky and require precision alignment or one will be trying to overprint trapezoids on rectangles. Direct separation negatives are uncorrected for dye deficiencies and must be “post-masked.” When the original is an Ektachrome or Kodachrome, the transparency is masked to make pre-masked separation negatives which are ready to expose the matrices. Registration is much simpler and this is by far the most commonly practiced method.

Pan Matrix Film. Perhaps the simplest approach to dye transfer is to use Pan matrix film. A color negative or internegative is used to expose three matrices through red, green and blue filters. Unlike conventional blue-sensitive matrix film, total darkness is required for matrix exposure and processing. However, the tone and color correction options are much less convenient and harder to use than with the conventional approach. Nonetheless, with a reasonable amount of time and patience, the knowledgeable C-printer or advanced B & W person will soon be producing prints qualitatively exceeding any tri-pak material.

Additive vs. Subtractive Printing. Tri-pak color materials are printed both additively and subtractively. In additive color, print-

ing three successive exposures are made with the color material through the red, green and blue Wratten tri-color filters: 70, 99, 98. In subtractive color printing, one exposure is made through a combination of cyan, magenta and yellow filters. The latter are either CP filters, which come as sheets in varying densities and are placed in the filter drawer, or the dichroic filter type, which are in continuous density gradations of cyan, magenta and yellow.

At least two persons asked about the new Phillips additive printing head. We have little contact with this technology but my experience has been that additive printing gives slightly better saturation than subtractive printing. In fact, most rigid B & W enlargers can be used with merely a filter holder below the lens and a good timer with tenths of a second. You will be surprised how easy the filter changing and sequencing becomes. The exposure will be a simple ratio of red to green to blue and will vary with the color temperature of the light source, but once it is established as a normal it is variable as needed. Burning and dodging requires extra precision but one learns soon enough.

Cibachrome Masking. People often ask about masking Cibachrome to reduce its extreme contrast characteristics. This can be accomplished with limited success by making silver masks from the transparency through various filters and using the masked transparency to expose the Cibachrome. Ilford makes available a simple procedure for this but the most sophisticated systems are developed by custom houses. Like most masking systems, tone compression is usually incorporated with color correction and the specific mask filters and densities will vary according to the following: (1) density range of the transparency, (2) transparency colors being corrected, (3) print dye deficiencies being corrected. However, contrast reduction masking works with limited success in Cibachrome as the material has the ability to produce an even gradation of dye thickness from highlights, through middletones, to shadows. The azo class dyes are coated during manufacture and reduced to varying thicknesses by a process known as dye destruction.

By this reduction process, highlights are thin layers, shadows thick. The problem is the middletones which should be of medium thickness but actually tend to go thinner or thicker. A characteristic curve would show a dip in its middle.

Nonetheless, by limiting oneself to transparencies with lower con-

trast, prints of high color saturation, resolution and permanence can be made with relative ease.

Guy Stricherz, Curt Rowell
CVI Laboratories, NY, NY.

We get a lot of inquiries concerning storage life and capacities of various solutions and it might be a good idea to list them here for reference:

Product	Shelf life	Stock solution in full jug	Working solution	Capacity
HC-110	indefinite	3 mo. (dil. "B")	1 day	4 rolls-qt.
Zone VI or Dektol	indefinite	6 months	1 day	4 rolls-qt.
Acetic Acid stop bath	indefinite	-	3 days	75 8x10-gal.
Zone VI or Kodak Fixer	indefinite	2 months	1 wk	100 8x10-gal.
Hypo Clearing Agent	indefinite	3 months	1 day	200 8x10-gal.

These recommendations are from the "Kodak Black and White Darkroom Dataguide." The stock solution life of half-full jugs is given as 1/3 the life of the solution in a full jug. All of these figures are based on unused solutions. Solutions should never be poured back into jugs for re-use with the exception of some film developers which are replenished after each use.

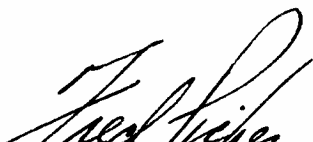
These recommendations are based on commercial maximums. I cannot imagine any serious printer developing 120 8x10 prints in a gallon of developer. I dilute Zone VI developer one quart to three quarts water to make a gallon of working solution for developing 8x10 prints and after making about ten prints from two negatives I throw it out. In addition to the ten finished prints there have probably been three or four test strip prints and a dozen trial prints put through that gallon and they count too. I figure about twenty five prints to the gallon for top quality. The slightest loss of print quality to save a few cents is unacceptable but by the number of inquiries we receive, there are a lot of folks playing chemical brinksmanship. When in doubt, throw it out.

Did you wonder what has delayed the introduction of our new meter? Professor Paul Horowitz. He has a rather weak excuse. He says he's been busy. Did you happen to see him on tv about March seventh? He was on the national news and so was his wife Carol and their friend Cornell Professor Carl Sagan and a hundred or so physicists from here and there and several small swift children and dogs. The event was Carol's Big Champagne Bottle Smashing Show To Celebrate The Start Up Of Paul's New Radio Telescope which he designed and built and computered. It's not bad. It's the largest and most sophisticated telephone answering machine in the history of the planet. It is open to receive toll free calls from any E.T. in outer space on a 24 hour schedule forever. It covers 128,000 channels and sees out to 1,000 light years. He designed the dish 84 feet in diameter so that Carol would have an adequate target to swing at. It's so advanced that its computers can keep it operating all by themselves (other computers keep watch so that there is no slacking off) and all this at an operating cost of only \$20,000 a year. I enjoy calling him to ask, "any calls?" and "any word from the Nobel folks?" I told him he won't get the second call until after he gets the first. But now he is free to get on with something more important and I'll be going to Boston this week in an attempt to reactivate him. We have hopes that we will have our meter ready by fall.

Last week I received a call from Richard (Chip) Benson who does a large percentage of the most important printing in the world. He prints Strand's negatives, Atget's, Stieglitz's and shoots the halftones for many important photographic books such as the recent superb Callaway edition of Stieglitz. Anyway, he called to tell me his ancient cold light expired and he needed a new one and a stabilizer, fast. I told him about Africa and that I was printing the 35mm negatives and hating it. Chip doesn't like printing 35 any more than I do but he said that he was getting good results from a weird film and developer combination. He said the negatives looked awful but that they "printed like silk" and it was rated 400 ASA. I get a lot of advice about materials to try, but I don't have the time and unless I see good work, I don't bother. But when Chip speaks, I listen! I'm going to get some and will give you my findings in the next Newsletter.

The June workshop is about full, but there are several spots still available for August.

With best wishes,

A handwritten signature in dark ink, appearing to read "Fred Risen", written in a cursive style.

ZONE VI Newsletter

Number 36, July 1983

One never knows, do one?
Fats Waller

In the last Newsletter I mentioned the recommendation of the outstanding printer Chip Benson concerning a 35mm film. It is Ilford XPl 400 speed film. The emulsion is dye, not silver, so it must be developed in the same chemicals that are used to process color film. There seems to be general agreement that the dye emulsion will not last as long as properly processed silver emulsion films so if you are concerned with a life of more than twenty years for your negatives, investigate this closely.

My test procedure was designed to make an exact comparison of 8x10 prints made from two films. It doesn't matter to me which film is better at resolving test chart lines or has a fancier curve shape or makes 30"x40" prints or has more or less slope or gamma or gradient. The only thing I want to know is whether it is better for making photographs than Tri-X. What's "better"? Not just obvious features like fine grain, sharpness, more or less contrast, etc. A very few films can transmit a subtle but definite feeling of space, volume, light, substance and depth. If you were to mention light and substance to the average trained sensitometrist, you might get a funny look. I am reminded of the Scottish

gentleman who told me, "I don't believe in the little people, but they are there."

On a cloudless day I set up a 35mm camera on a tripod ten feet from the door of my woodshed. The materials in the picture included middle gray painted siding, freshly painted white trim, a black matte finished metal roof, a hex sign with some red and yellow areas, and the open door through which you could see, dimly, the log ends. The materials were partly in sun, partly in shade. My procedure was to tripod the camera, load a roll of 35mm Tri-X, close down to f/22 and make an exposure at 1/1000 second. This is the minimum exposure the camera is capable of and a sure underexposure. Then I halved the speed, exposed again, etc. until I had made exposures at one stop (actually doubling the exposure using the shutter) increments to 1/8 second. That was a sure overexposure. I didn't use a meter because I was not interested in the actual speed of the film; only a comparison of speed and print quality between the films. Then I loaded the XPl film and repeated the procedure. I had no color developing materials so I sent the XPl film to a color lab for processing. I processed the Tri-X for 5 1/2 minutes in HC-110 "B" as usual. When the film came back, it looked awful. It was brown and had a dense base, but we don't look at negatives; the print's the thing. I started out, as always, with a proper proof. The test for first black through the clear film edge

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indicated that the XPl required twice the enlarging exposure to get through the film base. Small wonder; the densitometer indicated a base density of .27 for Tri-X and .45 for the XPl. I lined up the two strips, one above the other on the same sheet of paper, and exposed both films for ten seconds. Then I covered the Tri-X and gave the XPl another ten seconds. The proof showed that the films were exactly the same in speed; the log ends showed up at the same exposure. The manufacturer's claim that the XPl has latitude is a manufacturer's claim. It doesn't. It can't. One stop under looks exactly like one stop under always looks and in this case you can't see the log ends; one stop over looks like one stop over and the delicately separated high values pile up on the shoulder and merge. Just like always. The XPl showed slightly more contrast than the Tri-X developed to my normal. The difference appears to be less than a paper grade; inconsequential.

I chose the two best negatives and made a test strip of each for an 8x10 print. The printing time indicated was twice as long for the dense based XPl. I exposed the papers one after the other and developed them together.

Very interesting. The XPl print showed far less grain. The middle gray areas of the Tri-X print showed the characteristic oatmeal 35mm look. There was a cleaner, sharper look to the XPl print and, though the difference wasn't spectacular, it was easily visible. In overall quality, I would guess that the improvement was on the order of magnitude you might expect when going from 35mm to 120 film size of the same brand. I am satisfied that

the XPl film was superior on that very bright day for that subject and certainly worthy of further exploration. I will use it for a while to see if its apparent quality holds up over a range of subjects and lighting conditions. Whatever speed you expose Tri-X at will be proper for XPl (assuming the color processing you get is similar to what I got). If you have experience with this film or have information regarding its archival probabilities, please write to me; I'll pass the word along.

★

There seems to be a developing interest in the making of platinum and palladium prints; quite recently many inquiries have arrived. At each workshop we have had a staff member expert in platinum and palladium printing. Until this year it had been Carlos Richardson, but his travels in the Pacific mandated a sabbatical. I was especially fortunate in recruiting another outstanding worker, Joseph DeCarlo, to take Carlos' place. Joseph is a full time professional and maintains a fine studio in Brattleboro. Most of his personal work is printed in palladium. Because I was always otherwise engaged when Carlos was demonstrating the technique, last week I asked Joe if he would explain and illustrate the process slowly enough for me to make notes.

Sometimes platinum and palladium prints look so similar that knowledgeable museum curators regularly label prints of unknown pedigree, "Platinum or Palladium." When there is an obvious difference, the platinum appears colder in tone. Because platinum costs five

times as much as palladium, often looks the same, and lasts no longer, most "platinum" prints are now made from palladium. Years ago it was possible to buy platinum paper ready made but now you have to make your own. It's tedious, but it isn't hard.

The negative: Palladium is so slow that enlargement is impractical. It is therefore necessary to contact print it. That usually means a negative of at least 4x5 inch size, though I have seen some jewel-like contact prints from 120 film. If your negatives are smaller, they can be enlarged onto 4x5 or 8x10 film just as though you were making a print. This will give you a positive negative which can then be contact printed to another sheet of film to put it back into negative form. I have heard that there is an 8x10 reversal film that will do all that in one step, but I can't find it in my Kodak book.

Because the greatest attribute of palladium is an amazing scale of delicate values, a negative of a range so great that it would be unprintable on silver is not only useable, it is desired. Specifically, the high value density of a negative to be printed by contact or cold light on silver paper might be of an order of 1.30 over film base plus fog. This will vary depending on the print developer and the paper used. For palladium, a high value density of 1.7 to 2.0 over film base is best for a full scale print but a negative with a high value density of 1.5 can also make a good print. Joe's procedure is to expose two negatives. One is developed for the normal time in HC-110 "B" (1-31) dilution; the other is developed for the same length of time in

HC-110 "A" (1-15) dilution. His normal time is 6 minutes; mine is 5 1/2. He exposes the second negative a stop less. The double concentration of the "A" dilution provides the high contrast negative for palladium; the "B" developed negative can be printed on silver.

The paper stock: You can print palladium on any paper but because the image is formed of raw palladium, one of the most stable metals known, it would be silly to use any paper that is not also archival. Artist drawing paper is recommended. It should be acid free 100% rag with a neutral PH. I think that is .7 PH. Joe is currently printing on Rising Bristol two-ply, plate finish. It is very bright and clean looking and has a nice hard (plate) surface. You can buy it at an artist supply store.

The emulsion: The emulsion is composed of three ingredients. By varying the proportions you can control the print contrast.

1. Ferric oxalate. This is sensitizer bottle number one. Joe bought a quart years ago. He says it will last a lifetime. It costs about \$20.00 and you can get it from Fred Foster, 77 Summit St. Prospect, CT, 06712. It's nasty; don't touch or breathe it. Store it in a cool dark place.

2. The same mixture of ferric oxalate used in the first bottle is used again but this time potassium chlorate is added to make sensitizer bottle number two. An ounce of potassium chlorate, Joe says, lasts forever. You can buy it in a drugstore. You add one half gram to 50cc of sensitizer number one. The more

sensitizer number two you use, the more contrast you get. Also the more grain and loss of resolution you get. That is why it is an advantage to get the necessary high contrast in the negative rather than in the print.

3. Palladium bottle number three. Joe buys palladium from Engelhard Industries, Inc. of 42 Delancey St., Newark, N.J. 07105. Ask for "palladium chloride." Palladium chloride has the necessary salt already added. If you buy a hundred grams it will cost three to four hundred dollars. A hundred grams will make six hundred 8x10 prints, but if you buy less, it will cost much more per gram. Palladium printers usually form a pool, buy a hundred grams at a time, and divide it up. Palladium chloride looks like a fine powder and is prepared by adding one gram to 80cc of distilled water heated to 125 degrees. You shake the bottle hard every ten minutes for the first hour, then let it hibernate overnight before using. It will last indefinitely if you keep it in a cool dark place. Shake the bottle hard each time before use.

Coating the paper: Use a sheet of printing paper at least two inches longer in both dimensions than your negative. Use masking tape across the corners to fasten it to a scrap mat board. Lay a scrap negative of the size you will be printing in the center of the paper and mark the four corners lightly with pencil. To prepare the paper for exposure you mix an emulsion from the three bottles of solution and paint it on the paper. The traditional method is to store the solutions in small bottles with glass eye dropper caps. Joe mixes the three solutions that make up the

emulsion in an old egg cup, but any small container with a rounded bottom would do. A whiskey shot glass would be fine.

For a very contrasty negative with a high value density 1.8 or higher, you might start off with the following mix: 20 drops of #1, 2 drops of #2, and 22 drops of #3. For a normal negative for silver printing with a high value of about 1.3 density over film base plus fog you might try 11 drops of #1, 11 drops of #2, and 22 drops of #3. Notice that the total of #1 and #2 drops always equals the #3 drops and the grand total always adds up to forty-four drops. Forty-four drops will cover for an 8x10 print. For a 4x5, divide drops by four.

Mix the emulsion in the cup and pour it into the middle of the sheet. Brush it either from left to right or top to bottom between the corner pencil marks. Don't brush back in the direction from whence you came; it fuzzes up the paper surface. The brush should have no metal parts; the Japanese water color brushes about an inch and a half wide are a good choice. They are available in art supply stores. After the emulsion is smoothed on nicely, write on the clean paper edge 16, 6, 20 (drops) for a print from a negative with about a 1.5 high value density. Also write 5 minutes if you intend to expose the print in sun light. These are typical emulsion mixtures and exposure times. You can do all of this under a fifteen watt bulb; the emulsion is not very light sensitive.

Detach the coated paper from the mat board and wave a hair dryer over it, back and forth. In about ten minutes when the face is

dry to the touch and looks crinkly, turn it over and dry the back. Some people hang the treated paper in a dark cabinet to dry, but Joe says he gets brighter whites by drying it quickly.

The exposure: When the paper is dry, place it in a contact print frame with the negative, emulsion to emulsion. The quickest way to expose the paper is in direct sun. On a clear day exposure times are usually in the five to ten minute range. Prop up the frame so that it faces the sun directly. Time the exposure. The contrastier the exposure mix, the longer the exposure time. Other light sources for exposure are arc lamps, but they are awful things. They spit fire and smoke and give off a lot of heat. Joe has constructed a special box with a grid of black light tubes and a timer that does a fine job. Exposure times with it are about twice as long as in sunlight. This sort of rig is expensive, so it is better to use the sun until you are sure that you will be printing palladium with some degree of regularity.

The developer: Tray #1 contains potassium oxalate. Dissolve one pound of it in 48 ounces of distilled water at 120 degrees. (If I didn't mention it, all solutions are made with distilled water except the final wash.) Pour about 8 ounces into an 8x10 tray. The print develops in seconds, but you leave it in for one minute. Keep your hands out of this stuff; use wooden tongs to handle the print and tip the tray to agitate. After use, the developer is returned to the bottle. The developer gets better with use and you never throw it out. When the bottle gets down to about eight

ounces you make up a new batch and add it.

Trays #2, 3, and 4 are all the same. They contain hydrochloric acid which is used as a clearing bath. This is available from the drug store and the solution is a 1-60 dilution in distilled water. The print spends five minutes in each tray with constant agitation. Use just enough to cover the print. The first tray is thrown out after each print, the others are moved forward, and the first becomes the last with fresh clearing bath. Wash the print for twenty to thirty minutes at about 70 degrees and hang on clothes pins to dry.

Use only plastic or glass trays, graduates, tongs, etc. Local print control by dodging or burning is possible, but is seldom done. The emulsion is so long scale that it is sort of self-adjusting. The prints are not dry mounted; they are fastened with linen corners to a regular mount board and covered with a window mat. Palladium printing is a tedious process, but the exquisite print quality is obtainable in no other way. It seems to me that palladium lends itself best to atmospheric soft subjects such as woods in fall, portraits, and clouds. The color is a warm tan to brown-black. Those who use the process often grow addicted to it and lose interest in making prints conventionally.

*

The meter project proceeds in fits and starts. Paul Horowitz, the man who is developing our meter, is currently submerged in a Department of Defense think tank in California so he is of little use to those

among us who yearn for a meter that tells the truth. It has been a harder project than originally envisioned; we found out how far off the mark existing meters are and how much work there was to do. The next Newsletter will describe the trials, failures, and the final result. I have a reworked Soligor one degree meter and though it has been taken apart and put back together so often that it looks as though it was run over by a truck, it works flawlessly. It is perfectly linear. When Paul returns in the fall he will design for manufacture the parts, electronics, and filters that are required. Initially, we plan to invite owners to send us Soligor one degree meters to be modified to our standards.

I devised a test for linearity that is more accurate than can be done in a laboratory. Here's a rare chance to exercise your common sense and your technical know how for personal profit; if you can figure out how to test a meter for linearity under all conditions using only a meter and a camera, we will publish your description of the procedure in the next Newsletter and send you five boxes of Brilliant paper. Include supporting materials if indicated. In the case of two or more correct answers, the first to arrive shall be the winner. Think. Test. Write. Win.

★

This morning I received a call from Bill McKenzie from Sioux Falls. Bill is an old friend who has stayed in touch since he attended a workshop years ago. He told me he was checking out a new Hasselblad against an

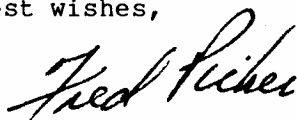
RB that he has used for many years. He was surprised to find that negatives made under the same conditions with both cameras showed that the new Hasselblad lenses produced negatives of higher contrast. I was reminded of a conversation that I had with Arthur Kramer of Modern Photography. I mentioned that many big landscapes that I had made in Iceland had less contrast than the meter, or my experience, indicated that they would have. Why? We finally tracked it down. The softer negatives were all made with a 12" Artar process lens. Arthur explained that sharpness in a lens is often gained at the cost of contrast. For a process lens, contrast is unimportant; sharpness is. Now I regularly develop negatives made with this lens longer than normal. If you want to find out about differences in the contrast characteristics of your lenses, make an exposure of a full range scene with each lens. Same scene, shutter speed, and f/stop. Use a tripod, focus on the same point. Process and proof the negatives together and compare the contrasts.

*

I will head the photography department at Marlboro College, Marlboro, Vermont this fall. Through the courtesy of The Polaroid Corporation, we'll use Polaroid film. I'll keep you informed on the rate of aesthetic growth of students unencumbered by technical baggage.

Africa applicants: I'll be in touch in October.

With best wishes,

A handwritten signature in dark ink, reading "Fred Fisher". The signature is written in a cursive, flowing style with a large, prominent "F" and "S".

ZONE VI Newsletter

Number 37, November, 1983

Time is the least thing we have of.
Portrait of Hemingway
Lillian Ross

I have decided to try to see what may well be the last of the world before it sees the last of me. The plans are set for the Kenya trip and it will be wonderful. Those who have written have received descriptive literature, itineraries, and application forms. If all who expressed interest sign up there will be no more room, but if you are interested, contact me for full information because there may be cancellations through changes of mind, heart, or pocketbook. The 18 day trip leaves Sept. 12, 1984, and costs \$3,195.00 including airfare from New York.

No? Then how about China? I would not mind seeing sights such as 7,500 life-size terra cotta figures guarding an emperor's mausoleum. We'll go through Tokyo to Beijing, Xian, Hangzhou, Guilin, Guangzhou and Hong Kong. This trip will leave San Francisco on April 14, 1984 and return May 3. The cost is \$3,125.00 including airfare from San Francisco. I think that traveling with other photographers will add an extra dimension of pleasure to these trips. Write or call me at (802) 257-5161 for full information. I am usually in the office on Monday and Thursday.

FINALLY, THE ZONE VI LIGHT METER

Light meters often supply incorrect exposure information. Unaware of their idiosyncrasies, we get upsetting results. I once heard Ansel Adams say, "the trouble with meters is that they don't cost twenty five hundred dollars" and that was in the days when you could get a new car for \$2500.00.

As far back as 1972, when I wrote The Zone VI Workshop, I distrusted meters. On page 34 I wrote, "A similar setup as the one for the film speed test is used. This time, Zones VIII, VII, and VI should be recorded with the card in sun; the lower Zones with the card in shade. Theoretically this is not necessary, but some meters do not register in a linear manner for varying light intensity so this approach is worthwhile to duplicate field conditions as closely as possible." I thought, until recently, that meter problems had to do with linearity plus some mystery I didn't understand. Zone VI meters were all linear, but the mysterious exposures persisted. In frustration, I worked out my "key exposure" system which avoids the use of a meter.

The key exposure system usually provides a decent negative, but placement of various reflectances is by guess. For precise work I used a meter and tried to estimate the direction and extent of its errors. I knew that blue sky often appears lighter in the

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print than the meter indicates. But green, especially foliage, appears darker; sometimes three zones darker. Faces appear darker. When I placed faces on VI, I always ended up dodging them in the printing, don't you? And low values often appear lower in the print than placed. What happened to all the zone IV placements that should have had nice crisp separation but ended up like mud? In bright sun, high values placed on VIII often appear on VI. Though I often knew the direction of the errors the meter would be likely to make, I never knew the extent of the errors. In a certain situation you might expect a one stop underexposure but you might get a three stop underexposure. A good test had to be devised to illustrate the kind and extent of the errors meters were making and to prove, once a better meter was made, that it was performing accurately in all conditions.

We offered a prize for a description of a test for meters that would indicate accuracy under all conditions. No one won; "all conditions" include the effects of: 1) flare, 2) ultra- violet, 3) infrared, 4) the enormous range of light intensity found in nature, 5) subject color, 6) filter effects, 7) the ambient temperature, and 8) the spectral response of the film.

THE TEST

Photograph a host of subjects of different colors under every imaginable light intensity and spectral condition. Place each subject on Zone V. The negatives should all have the same density. That's the test. Try your meter. Proof and compare your negatives.

Zone VI Spot Meter

Paul Horowitz

When we began our meter project, we weren't sure exactly what caused meter problems; we only knew that they **had** problems. Objects placed on Zone V sometimes wound up on the print as Zone III, sometimes VII. There seemed to be some persistent errors -- foliage always underexposed from one to three zones, sky consistently overexposed, typically a stop or more. Late afternoon often seemed to produce underexposure. And shadow areas that metered as Zone II often "dumped" into total black.

In spite of these shortcomings, 1° "spot" exposure meters are the obvious choice for Zone system photography because they let you see zone placements of selected areas and they let you do it from the camera position. The objective of our spot meter project was to find out what was causing problems in existing meters, then design a "perfect" meter.

We started with a few preconceptions. We suspected the "linearity" of meters, that is, whether the meter showed exactly one stop change when the light level was exactly doubled. We also knew that some spot meters had problems with flare and reflections, so they read high when you try to meter a dark area with bright areas nearby.

Things don't always turn out the way you expect. Existing spot meters are admirably linear, as we found out by careful measurement. You won't account for more than a fraction of a stop error, except possibly at the extreme low end, from this effect. Internal reflections do cause some serious problems (more on this later). But, to our surprise, the most serious effect of all had nothing to do with either of these.

What's Wrong?

We had the expert help of Dennis Purcell (his wife, Rosie, often lectures at the workshops) in our meter project. He's an experienced photographer, and a former assistant to Ansel Adams. He's also the inventor of an extremely precise color meter, one that tells you what filter pack to use in any situation, to compensate the effects of color film and lighting variations. We used his precision photometer and light sources to measure meter performance, and happened to remark to him about the problem of foliage underexposure. Well, he knew all about it. While testing an early version of his color meter, he discovered that it worked very well most of the time, but it gave him completely crazy exposures when he tried to photograph glowing metal bars in a steel mill. The problem is in the infrared response of the meter: Film, like our eyes, can't see the invisible infrared part of the spectrum, but light meters can, and they're fooled by it. The amount of infrared reflected by all objects is in general unrelated to the amount of visible light they reflect. If you try to meter a dark object that reflects a lot of infrared, you will underexpose because the meter responds vigorously to the invisible infrared **it** sees, but film doesn't see infrared at all.

Foliage (and green vegetables) typify objects having this special property of being dark in the visible portion of the spectrum, but almost "white" in the invisible infrared. That's why foliage comes out white when you use infrared film. Figure 1 shows that graphically. Look at the curves for leaves and fruit, with their rising brightness in the infrared, contrasted with the complete lack of sensitivity (figure 2) of Tri-X in the infrared (or even the visible deep red end of the spectrum). The color sensitivity of meter cells does not match the color sensitivity of film. Even the improved "blue cell" meters see the infrared, and that's why we have all been underexposing our foliage, etc., all these years. Look at the curves of silicon photocell response in

figure 2. Late afternoon underexposure is caused by the same effect. Figure 3 shows why: Late sun is rich in red and infrared compared with visible light, as we all know from those orange slides that come back from the photo store.

The Ideal Spot Meter

If we could make a meter whose spectral response matched that of film, then incorrect exposures would be a thing of the past. It wouldn't be fooled by infrared-bright objects, because it would be blind to those colors that film is also blind to. In other words, the meter reading would, for the first time, accurately predict film density, and previsualization would be exact. This would be true regardless of the brightness or nature of the light, the color of the object, or the amount of infrared or ultraviolet (or both) it reflects. An added benefit would be to make filter factors obsolete. Instead of guessing the effects of, say, an orange filter on sky and foliage, you would just meter through the filter, placing your zones exactly.

Approaching the Ideal

We began by looking for a photocell material or filter that would accurately match film's response. We investigated several photocell types (such as the exotic schottky-type Gallium Arsenide Phosphide) to replace the existing cells. We found that no photocell available comes close to matching film's spectral response, so we decided to combine the best available cell with modern multilayer dielectric interference filters. With such a filter you can tailor the cutoff to match the film. We had hoped to be able to use a commercially available infrared cutoff filter, such as the Kodak type 301, which sells for \$120 for a two inch square. Unfortunately, the 301's cutoff is too high (685nm); we tried one anyway, and the performance, though greatly improved, fell short of ideal. We wanted performance as close to perfection as

possible, so we were forced to have some special 15-layer interference filters designed (\$455 for a two inch square), and put one in a commercial spot meter to see what happens.

Ultraviolet is Also a Problem

Fred and I took a few rolls with this modified meter, photographing a variety of objects. We placed each object on Zone V -- White paint in sun, rug in artificial light, my wife's bright red car, my blue pants, clear sky, leaves everywhere, etc., and we photographed everything through filters of different colors. The exposures varied over an enormous range of brightness, color, etc. After metering these objects with our modified meter, we compared the indicated exposures with those suggested by two unmodified meters; then we exposed film in accordance with the modified meter's reading. The results were impressive -- densitometer scans of the developed film showed less than one half stop error in all cases (except for one exposure), compared with several stops error in the unmodified meter. The one big error our meter made was in evaluating blue sky. (All meters instructed us to make a stop and a half overexposure there.) Back to the drawing board (and Dennis Purcell), where we found out that invisible ultraviolet (the opposite end from infrared) is also a problem. See the graph of skylight in figure 3. This problem would be more serious in mountain photography, where unfocussed UV light reaching the film causes overexposure, lowered contrast, and, in color film, a bluish cast. Films are **very** sensitive to UV, and in fact black and white film has its maximum sensitivity in the UV. But light meters are very insensitive to UV.

The obvious cure would be to do the same thing we did with infrared -- make the meter respond to UV the same way that film does. There are three problems, however. First, different films are not consistent in their UV response; for example, Polaroid type 52 is extremely UV-sensitive,

much more so than Tri-X (even though its sensitivity in the visible portion of the spectrum is almost identical). Secondly, different lenses vary widely in their UV transmission, depending on number of elements, coatings, etc. Third, most lenses are not corrected to focus UV light.

For all these reasons we decided the best approach to producing accurate metering in the presence of excessive UV is to block UV from both the meter and the camera. You do that by using either a "UV" or "skylight" filter (type 1A) over the camera lens, and equivalent filtration inside the meter. Since this problem is not as serious as the "infrared anomaly", you could omit the camera filter for many subjects, but should use it at high altitudes.

We've Fixed the IR and UV; What About the Visible?

Having added a UV-blocking filter to our meter, we now turned our attention to the visible region of the spectrum. Is it possible to match the response of Tri-X film accurately? Would such a meter work well with Polaroid, or with color film?

Having solved the sticky problems at the infrared and ultraviolet ends of the spectrum, we solved this problem easily. We got accurate response curves for our chosen photocell from the manufacturer and corresponding film response curves from Kodak. We compared them, then designed a filter pack to bring the photocell response into agreement with Tri-X. Color films and other black and white films are quite close, but Polaroid 52 is more blue-sensitive (we got whiter skies than the meter indicated when we did exposure tests with it). Our final compensating filter pack consists of four special filters (infrared cutoff, ultraviolet cutoff, and two color compensating filters matched to the new cell's intrinsic response).

Flare and Reflections

Our spectrally modified spot meters were way ahead of any meter we had used, but they still exhibited their original tendency toward flare and reflections under typical conditions. Under extreme conditions (such as a lamp in the picture area) shadow readings were off by six to eight stops. We cured this problem by designing a combination of two baffles that we added to the meters, and by applying a special wideband ultra-black coating (it's black even in the infrared, past 2.2 microns wavelength) to critical parts of the optical path.

The Acid Test

Using our modified Soligor II meter, Fred and I made Zone V exposures of dozens of objects under as wide a range of illumination, filtration, and light sources as we could imagine. We noted the actual exposures as well as the discrepancies between our meter readings and readings of the unmodified ones (a Pentax V, and Pentax Digital, and a Soligor Digital, all three of which agreed closely with each other). After developing the film, we scanned it with a densitometer. We found that 64% of the exposures were within 1/3 stop of placement, 86% were within 1/2 stop, and all exposures were within 1 stop. Even these small residual errors can not be attributed solely to the meter; when you are trying to read the meter within 1/6 stop, set lens aperture to 1/6 stop, and meter the subject along the lens axis, part of the final exposure error will be due to these factors. Reading a different part of the negative with the densitometer than the area actually metered also skews the figures. Although one could resort to laboratory measurements to remove some of these sources of error, our field tests are preferable since they are equivalent to actual picture taking. The performance of the modified meter is outstanding, as figure 4 clearly shows. If these had been actual photographs, all exposures would have produced easily

printable negatives. With the unmodified meters, 64% of the exposures were at least 1/2 stop off, 41% were in error by a stop or more, and 23% were off by 2 stops or more.

After completing several prototype meters as described above, we tested them extensively under field conditions. We were delighted with our negatives. They showed that, for the first time, we were able to previsualize filter effects and achieve zone placements under all circumstances with precision.

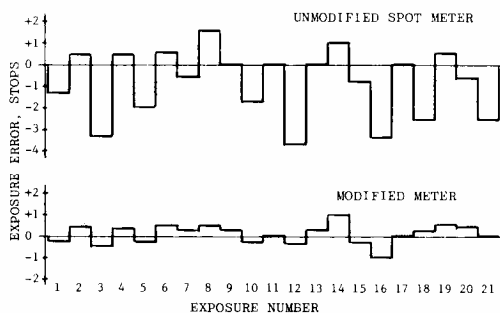
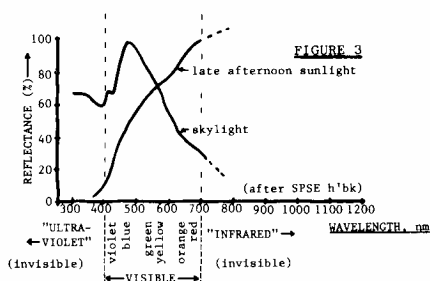
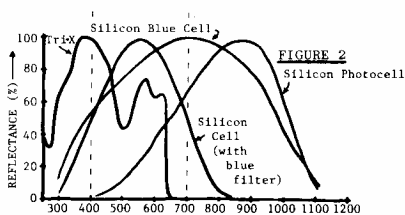
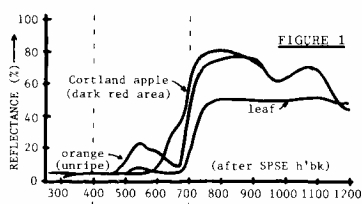


FIGURE 4

Paul has worked out a precise breakdown, assembly, calibration, and checking procedure with Richard Ritter. Richard is a fine photographer, a highly trained camera repair specialist and, if you have ever called for technical help, you have probably spoken with him. He has been with us for several years. To maintain control, all modifications will be done at Zone VI by Richard. After meters have been modified, they will be linear, corrected for subject color, corrected for infra-red, blocked for ultra violet, will contain the new cells, and will be properly baffled against flare. Paul built a wonderful light output device that is controlled by a stabilizer. With it, we can calibrate modified meters to a fine edge. Individual charts of the test results will be included with each meter. Our work is guaranteed, but manufacturer's warranties will probably not be honored after the modification.

If you would like to have your meter modified as described, please attach a tag or label to the meter with your name and address, wrap it in at least two inches of bubble pack, foam, or styrafoam "chiclets," and put it in a large (12") stout box. Insure it. Note the serial number of the meter on your order or your letter of instruction. Please don't send cases, holsters, lens caps, wrist straps, etc. Just the meter. Send it to Zone VI Studios, Inc., Newfane, Vermont, 05345. NOTE: The meter must be in proper working order; we are not set up to do repairs. At the present time we will only have time to modify new meters and Soligor meters which were previously purchased from Zone VI. Please don't send meters purchased elsewhere.

Our original plan was to design and build a meter from scratch but we found that doing so would be extremely costly. Existing meters, though lacking a few convenience features we would have liked, could be rebuilt to top specifications saving us the costs of design and tooling and saving photographers who had meters the cost of new ones.

Because most of the description of the meter project concerns the testing procedures and the actual modifications, it might be of interest to describe how the thing works (if there are any non-technical types still reading). Although my prototype modified meter doesn't yet contain the final bank-busting filter pack, (just the not-good-enough-for-Paul \$120.00 per sq. inch one) and has yet to be fine-tuned on the machine, it works remarkably. My proper proofs are precisely proper and it is hard to imagine I'll ever make another exposure that won't deliver the exact print values I envision.

Has something of far greater significance than the transformation of an undependable "aid" into a precision instrument occurred? If, as I suspect, photographic vision is strengthened by increased confidence in the tools, then Paul's accomplishment may some day be as highly regarded for its contribution to the advancement of the esthetics of the medium as it is certain to be for its contribution to the advancement of its technique.

With best wishes,

A handwritten signature in dark ink, appearing to read "Fred Fisher". The signature is fluid and cursive, with a large, sweeping initial "F".

ZONE VI Newsletter

Number 38, February, 1984



Outer Hebrides, 1982

Fred Picker

The photographer of ancient ruins was confronted with motifs that were generally required to be treated as artworks, but which lacked the singularity of painting, sculpture, or decorative object. Moreover, the ruin, like the living city, spreads readily beyond the scope of a single picture. The challenge was to isolate a view that expressed the multiplicity of the subject. (Emphasis supplied)

The Truthful Lens

Lucien Goldschmidt and Weston J. Naef

A fascinating aspect of photography is working out what Paul Strand described as "the architecture of a photograph." Henri Cartier-Bresson said, "I think there is ugliness only when a thing is disorganized." When photographs are well seen and the arrangement of their elements enhances the more personal aspects of the photographer's involvement with the subject, the resulting images can be striking. Because of their straight lines, repetitions of form, symmetry, and continuity of tone, objects that are man-made often lend themselves more easily to precise imagery than random shapes found in nature. They are good learning material; a good place to start.

Even in those instances where careful

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arrangement of the elements fails to provide, in the print, the emotional excitement the photographer hoped for, the result is still more interesting than a photograph of the same subject done in a casual manner. And the photograph was, at the least, a worthwhile training exercise.

If the photographer was primarily attracted by the compositional possibilities of the subject rather than the more profound aspects of the subject, the result might be a picture that, though visually elegant, has lost the spontaneity, the humanity, required to make it expressive. Precise arrangements of this type that turn out to be more than exercises in composition, therefore, have walked a fine line. Those that work often seem to contain a contradiction; an apparent carelessness that emphasizes the careful design of the other elements.

As a marvelous example of precise imagery, I tried to write about a photograph that I own in original print form and that I have never tired of. It is a picture by Paul Strand; a photograph of a group of houses in Gaspe'; "Village, 1936." It appears in "Sixty Years" on page 51. As I began to describe what I imagined his approach to the composing of this scene might have been, I became increasingly uncomfortable. I realized that I had no certain knowledge of what he was thinking. Perhaps the juxtapositions I found most provocative he found merely auxiliary. I therefore decided to use one of my own photographs. Although it does not contain the subtle, elegant references of the Strand picture, (in my opinion, almost no other

photographs contain the refinement of Strand's pictures), at least I can be sure of what the photographer had in mind!

I was disturbed by the subjects of this picture. Was it their strangeness? Cemeteries in Vermont don't look like this. Perhaps it had to do with being alone in a foreign land, the unceasing wind, the quality of the light, the emptiness of the land spread under the lowering sky. Though I am strangely drawn to the Hebrides -I've been there three times and will go again- I sense a history of great sadness there. This particular group of stones seemed to typify a host of qualities that might, in a photograph, serve as a visual summation of my impressions of the place.

Once I'd decided to make a photograph, my job was to enhance the power I felt in the scene. The strongest image controls the photographer can command are not technical, they are visual. They are the point of view -the camera position- and the timing.

Precise camera positioning is vital to the design of any photograph. Once the camera is in position, anyone can make the picture. Knowing this, I am constantly amazed that so few photographers give camera positioning anything more than the most casual attention. Many routinely set up on a nice convenient flat spot without regard to anything except their own convenience!

Carrying the tripod over my shoulder, I walked slowly back and forth in front of the stone, watching very carefully as the elements rearranged themselves. Take time. It is easier

to watch the relationships change if, like a camera, you keep just one eye open. And it helps me to see formal relationships, without the distraction of subject matter or color, if I squint and look through a viewing filter. By squinting, incidental details disappear and the arrangement and compositional weight of the elements can be more easily assessed. I was attracted by the small black finger sticking out to the left just under the pineapple at the top of the left hand post. When I reached a position where the finger nearly touched the pyramid-shaped stone, I stopped moving, set up the tripod, and rested my chin on it to check the position. Marie Cosindas says, "One has to begin to make a statement and then build upon it. With the first brushstrokes a painter knows his vision." The space between the finger and the stone was my first brushstroke.

With one eye closed and your chin on the tripod, you can get the tripod positioned very close to the spot you want. Force it into the desired position no matter what is in the way. In my car I carry a pruning saw on the end of a pole to clear branches and brush, I carry a rope to help me get down and back up steep slopes and raise and lower the camera case. I carry snowshoes in winter and a ladder and trout boots year round. I carry an axe. I carry a shovel. All this gear is just for the purpose of getting the camera into position and to get an unobstructed view of what I want to photograph. I once photographed the famous whale-shaped church in Stamford, Connecticut for the architects, Harrison and Abromovitz. There was a jagged line of low apartment buildings on a hill behind the church that

projected just over its whale-shaped back. All previous pictures included these distracting forms because there was no existing camera position from which they did not appear. So I created a new camera position. I dug a hole in the lawn in front of the church and a fan shaped path for the lens to look through and hung the camera upside down from the tripod. When the camera was about two feet below ground level the buildings behind the church disappeared. I held a mirror so I could see the ground glass to focus and got a picture that no one had ever gotten before. I also got a magazine cover and a new account.

Initial positioning of the tripod is easier for me without the camera; adjustment of the final camera position to the last millimeter (no exaggeration), is made after the camera is mounted.

To create a tension point -a powerful visual device- I arranged the camera position so that the black finger nearly touched the stone. Under that tension point, a triangle of sky appears. This triangle, though a strongly defined geometric shape, is a negative space. A strong nothing, an interesting contradiction. The shape and arrangement of spaces between elements is as frequently ignored as camera positioning. Come to think of it, if you have the camera positioned correctly, the spaces will be correct and vice versa.

We have no less than six position controls. After the camera is positioned left to right, we still have four more ways to control the relative sizes and positions of the elements. We can 1) raise or 2) lower the

camera and 3) move it forward or 4) back. By moving the camera forward, which has the effect of spreading the elements apart, I was able to arrange several other relationships. The little "wings" of the near stone could be effectively placed. The one on the left is now completely in the black of the pineapple and is nicely outlined. The other wing forms a tension point where it approaches the second spike. The pale stone at the far right is tucked up against the fence; to have spread it to the right would have made the picture too symmetrical. (The space between the stone and the pyramid would have been repeated.) This departure from the carefully handled spaces between most of the other objects is a deliberate carelessness, a contradiction that gives life to the picture. In addition to changing the arrangement of the objects and the spaces between, moving the camera forward has another effect. By moving very close to near objects, they are made to loom large. Though the near stone is not as large as the pyramid-shaped stone, it is larger in the print. This "near- far" effect, where a small near thing is made larger and a large far thing is made smaller, augments the impression of depth. A wider than normal lens is usually required to accomplish this effect. For this picture, the very useful 120mm lens was used. That focal length on a 4x5 camera covers an area between a 35mm lens and a 28mm on a 35mm camera. (If someone reading this knows how to figure the exact relationships between 35mm lenses and 4x5 lenses I think that would be helpful and I would be happy to include the information in the next newsletter.)

With the camera on the tripod, positioned

laterally and at the desired distance from the stone, I could see that lowering the camera would create additional interesting juxtapositions. From the first (higher) camera position, the line of low hills (at the left side of the picture), appeared higher than the pickets. That caused a merger; the black pickets merging with the black hills. I lowered the camera slightly by extending the front leg inch by inch toward the subject as I watched what was happening on the ground glass. Lowering the camera raised the pickets above the hills and now the hills form lovely shapes behind the pickets.

Look at the row of diminishing pale rectangles of sky between the tops of the far left pickets and look at the equal size and shapes of the triangles of the black hills and the light gray sky under the fleur de lis of the pickets. A slight further movement of the camera made another little tension point that is subtle, but important to the picture. It is near the center. It places the top of a picket close to the molding on the pyramid. This second tension point happens to coincide with the place where the pyramid changes from vertical to a pitch. All the objects and lines involved are strengthened because the lines are pointing at each other.

What else is going on? The picket against the sunlit wall of the pyramid divides that wall into two equal parts. Its black point pierces the black shadow under the molding at the top of the sunlit section. What else? There is one line in many photographs that is of the greatest importance although in this one, most of it is only imagined. It is the

line of the horizon. Starting at the left (the way books and photographs are "read") you read the line as it disappears behind the pyramid, appears again for an instant, then disappears behind the central stone, shows broken between the pickets at the right, disappears behind the pale stone and finally reappears at the right to re-establish its position.

If you don't see everything at the time you make the exposure, you won't find any pleasant surprises in the print. Forget about getting lucky. Surprises in art are almost always disappointing. That's why it takes even the very best photographers so many negatives to make even one good picture. Though every beginner is sure he is a natural, accomplished photographers know that there's no such animal. Like an athlete trains his body or a musician practices his instrument, a photographer must train his eye. Photography is very hard. The only route I know to even occasional accomplishment is through love and brains and sweat.

It is obvious that to make great photographs you have to study great photographs. It is possibly less obvious that to make great photographs, the study of great painting is perhaps even more worthwhile. Painters work more carefully. They have been at it longer, their tradition is stronger, they can do something every photographer envies; they can endlessly edit and adjust their original visualization until they have it right. Thousands of reproductions are as close as your library. Start with Vermeer or Rembrandt. In addition to everything else these two did superbly, their knowledge of

light was so vast it makes photographers squirm with discomfort.

We photographers should be making more thoughtful photographs. If the average musician performed to the standards of the average photographer, we'd all go deaf. We have spent a lot of years proving and re-proving that a new lens or a sharper film won't help make better pictures. Feeling strongly about the things we photograph, (photographing only those things), working hard to learn what we can about making expressive pictures of them, and expressing our convictions through our vision will strengthen our work and enrich our lives.

★

The last Newsletter drew a lot of letters. Many people were upset because we invited only those who had bought meters from us to send them back for modification. We thought it only fair to do those first. Luckily, we had a big stock of new meters modified and ready to go before the Newsletter went out, so Richard was able to concentrate on incoming ones. He's a long way from caught up. If you have a meter purchased from us, send it in; we'll continue to give those first priority. If you have a meter purchased somewhere else we'll modify it but figure six or eight weeks. The word has spread, raves are pouring in, there will be a magazine article, etc. and we have no way of guessing how many Newsletter readers have meters purchased elsewhere. We'll do our best. The first in will be first out. We have not and will not modify meters for the general public until our customers are served.

Many have called to ask if their own meters, after conversion, will require a new film speed test. Probably not. With your meter you will receive a note advising you of the reading for low light when your meter arrived and the reading after it was modified. If the readings are the same (rare) you need not re-test. (The new cells we put in are more sensitive than the ones we take out which gives great "headroom" to adjust them precisely.) If the chart shows your meter reads one number higher going out than it did coming in, it is one stop more sensitive than it was and the ASA setting should be doubled. We set true EV numbers so, assuming accurate shutters, Tri-X ASA ratings will be 400. (The film is really 200, but Pentax and Soligor set up the meters for Zone VI instead of V, we reset them to proper EV. In short, if you set your own converted meter or a new converted meter for 400 for Tri-X, you'll probably be right on the money.) For color, place a flesh tone on VI and try several ASA settings.

*

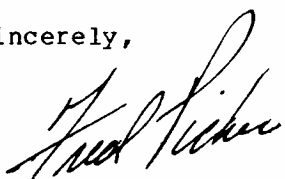
An item that I find extremely useful is a small tape recorder. I have had one for years and use it to remind me of everything. Mine is a Sony and it seems to run forever on four penlight batteries. It is the size of a package of small cigarettes. Because you can't safely write while driving, I use it in the car. If you keep a journal, it is handy. For notes for an article or book, I find it indispensable. On a recent trip to Africa I listed the places and important events of each day after supper. Here, I keep it on a bedside table and when I wake up at 4AM remembering

something I have to do, I just dictate it in there. I don't have to find the light, find my glasses, find a pad, find a pencil. I use it when photographing to record data. When played back it says things such as, "holder number 17 birch trees near Eskifjorder; exposure 1/25 at f/32, develop N plus one." Or "landscape with four sheep in diamond pattern is at Lochmaddy, North Uist. Number 12 filter 1/30 at 22. Other neg, sheep helter skelter, no filter 1/60 at 22." In cold weather, note writing is an especially onerous chore; you have to take off gloves, put on glasses, fish out pencil and paper, and write. With the recorder, you just slip off one glove, push the button, and talk. In a warm place at a later time the information can be put in writing.

To make the written notes I dictate in today's date for a marker, rewind the tape, and play it back. When I get to the date, I rewind it to the beginning and it is ready to start recording again. Tapes will last for an hour and even if you enter notes to pick up the laundry and have the oil changed and note the \$50.00 you spent for dinner with a client, you won't use up ten minutes a day.

There are several openings for China in April and Africa in September. Call if you have interest. Summer Workshop literature went out by only occasionally dependable bulk mail; if you have not received your brochure by the first of March, please call or write.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Fisher". The signature is fluid and cursive, with a large, sweeping "F" and a long, trailing flourish at the end.

ZONE VI Newsletter

Number 39, June, 1984

But oh! shipmates! on the starboard hand of every woe, there is a sure delight; and higher the top of that delight, than the bottom of the woe is deep. Is not the main truck higher than the keelson is low? Delight is to him -a far, far upward, and inward delight- who against the proud gods and commodores of this earth, ever stands forth his own inexorable self.

Moby Dick, 1851
Herman Melville

I had originally planned to leave Boston for San Francisco a few days before my flight to China in order to spend some time with Ansel Adams and other friends in California. But John Sexton was teaching a workshop at the time, so I rearranged my schedule to do my visiting on the way back. In Hong Kong I received the sad news of Ansel Adams' death.

That night we drank a toast to our dear friend. "Our" friend because whether or not a photographer was lucky enough to have known Ansel, he was friend to us all. He shared his knowledge generously and no one has had a greater influence on the medium and no one did more to elevate the public's appreciation of

fine photographs. Ansel's concrete accomplishments; The photographs, the books, the shows, the technical innovations, the leadership in environmental issues, the formation of The Friends of Photography, the workshops, have been well documented in the press, so I won't repeat his resume' here. I would like to tell you what it was like to know Ansel.

I met him at his workshop in 1968, one year after I developed my first roll of film. I remember telling him that I was serious, had no time to waste, and wanted to learn as much as I could as fast as possible. I told him I would work harder than any student he ever had and do exactly what he told me. To my surprise, he was amazed. Now, after 30 or 40 workshops of my own, I know why; no one ever says anything like that! I asked him how to make pictures while others asked him how to make prints. I was constantly after him to look at my groundglass and tell me how to clear my vision, strengthen the statement, tell me what I was doing wrong. (During your second year in photography you are always doing something wrong.) He challenged me constantly; "What are you trying to say? Say it, don't be tentative, penetrate, get close, simplify, (you're not good enough to be complicated), don't depend on flashy subject matter to carry you. THINK. LOOK. WORK, WORK, WORK." I was out every morning at 5:00 and worked until the light was gone. I showed him

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dozens of Polaroids every day. After the workshop he invited me to Carmel for a few weeks where I photographed every day and processed half of every night. He'd look at my proofs and roar, "I've seen it too often" or "it looks like a mouse in flagrant delecti; what is it? or "LOOK at the corners, LOOK!" He was rampant, funny, wild, honest, tough and wonderful. All I cared about was the occasional, "hmm" indicating that a negative merited a second look before it was discarded. Most photographers accord every negative the status of the Dead Sea Scrolls; Ansel made me toss out the garbage and I still do.

He was uncompromising and opinionated. He had a right to be; he knew what he was talking about. He taught me more than how to approach a picture; he taught me a unique approach to photography and a marvelous philosophy of life. He had no patience with laziness or short cuts or a lot of photo talk. In photography, workers are rare, but I wanted to work and that, together with our constant joking around, was the real reason we got along.

If you could take it he was tough. But no one I ever met was kinder or more generous with his time and knowledge than Ansel. I've seen him interrupt his dinner to take the 'phone and explain the Zone system to someone who couldn't understand his book. Sometimes the caller couldn't understand his explanation either; his language often bordered on Stengalize and that was part of his charm. His mind was so active that he leaped from subject to subject and back, without pause, and that bubbling energy remained with him until the

very end. As proof, I'll quote in full a letter dated January 28, 1984. I have recreated the spelling and punctuation!!!()() as it was written.

"Dear Fred,

Thank you for your lively letter! My next activity will be the Dump Reagan Campaign! That will be fun! We are so close to disaster-within and without- that "fun" is not the word for it. Sacred duty would be a better term.

I agree with your general photography analysis. The medium is plagued with the same curse of American advertising and industry-making more than we need and not making it well. The taste level is approaching a peneplane of poor taste and the absence of excelency. So!!!

The metronome idea sounds really swell!! It would accomplish the same fine tuned control in the darkroom as the meter will accomplish in the field. Paul is a genius! Give him my warmest. I must write him soon. We are not doing a card this year. I am saving my ammunition for the dissolution of the Reagan Philosophy. We have only nine months in which to assure a political revolution (by legal means. please!!) Good idea to improve on the Gralab timer.

The S.E.I. was remarkable for its time. It worked best in low light levels. I had very little trouble with it; others had a lot. I used an extension lens shade (a two inch tube) and that helped a little when working against the light. It was not a good bright-day instrument. I like the Pentax Digital.

APERTURE is a dissapointing mess. I do not like 90% of the present trends anyway, but APERTURE seems to bring it all into focus. I

have been told for 60 years that optical glass (regular lens types) does not transmit ultra-violet. The Polaroid 66 camera with its plastic lens was terrible in that respect and they had to install a gel filter to manage the transmission. Type 52 was all over the map in speed anyway. At the same location and time one box would be 500 and another box 800+. More soon. All best. as ever, Ansel"

Cocktail hour was always open house at the Adams' and a typical group included about twenty visitors of diverse backgrounds. He was partial to "Emerald Dry" white wine (which had the delicacy of old tennis shoes from a bad year, if you ask me), and after one or two glasses he'd assault -that's the word- the piano with heavy hand, monotone humming and gigantic enthusiasm. From his prints to his Cadillac, everything about him was big. When I left Carmel he told me to photograph constantly, to photograph only what I truly cared about, and to go back to it again and again until I finally got said what I wanted to say. He insisted that there was nothing more boring than a brilliant print of a fuzzy concept. He tried to impress upon me that, though a camera is nothing but a tool, it can be (therefore it must be) used for a higher purpose than the meaningless transference of already visible information onto a sheet of paper. Because camera could describe a worker's vision of his world, like a cello or a paintbrush, or a granite block, camera held the capacity for art.

He told me to proof every negative but not to waste time printing until two weeks before my return the following year. I did

what I was told and when I got back to Yosemite he told the staff and seventy students that my prints were the best work he had seen in 30 years of teaching workshops. Me he told, "keep working."

He was a dedicated environmentalist and he was outspoken in his politics. I received a letter in which he told me he thought the only thing that kept him alive was the momentum of his personal campaign to oust James Watt. He was so outspoken in his antagonism for Watt that in July of 1983 President Reagan asked to meet with him. That was a mistake. After their meeting, Ansel pronounced Reagan, "opaque -a substance that does not permit the passage of light ...in either direction." I always suspected that his outspoken directness indicated the presence of a Vermonter in his ancestry. He once described himself as "a constructive belligerent."

The greatest gift God had granted him, Adams said in a long-ago letter to Alfred Stieglitz written from New Mexico, was the Earth itself. "It is all very beautiful here ... a quality which cannot be described. The skies and land are so enormous and the detail so precise and exquisite that, wherever you are, you are isolated in a glowing world between the macro and the micro -where everything is sidewise under you and over you, and the clocks stopped long ago."

During his life he gave off more light than he ever recorded on film; his life was a celebration and he'd want no one of us to mourn his passing. Be happy he was here, be happy that his life was long and full and

rich, hope you'll meet him again, and for now, raise a glass to him every once in a while. He'd like that.

★

Most of the people on the China trip had been at one of my workshops and it was good to see them again. My first impression (which was strengthened as our tour progressed) was that they were overloaded. Travel is annoying enough without lugging fifty pounds of unnecessary junk along. This might be a good place for a tested reference list for a three week moderate weather trip.

Non-photo gear: Toilet kit, medicine kit, tool kit, penlight, Swiss army knife, writing materials and/or tape recorder, books, maps, brochures, alarm clock. Four undershorts, four T-shirts, eight pairs of socks, couple of handkerchiefs, three short sleeve shirts, one long sleeve sport shirt, one wash and wear dress shirt, one tie for it, two cotton pants, one dressier pair, one decent sweater for day or evening, one thin nylon "shell" anorak, (L.L.Bean, Freeport, Me.), one pair shoes. The best travel shoes I've found are Rocsport brand; half canvas and half leather. They are strong, light, comfortable, and they dry quickly. Goretex shoes are hot. No shorts for China; two pair for Africa instead of the two cotton pants. For Scotland, substitute corduroy pants for one pair of khakis, two turtle neck shirts for two "T" shirts, and a flannel shirt for a cotton one.

I put unexposed film in lead bags in my non-photo (checked) baggage. I understand that

checked baggage is not X-rayed but the lead bags are good insurance. Exposed film is irreplaceable so I carry it with me in a camera bag. The camera bag also holds cameras, reading material, passport, tickets, etc. I have never been in an airport where they would not hand inspect carry-on bags, but I've been advised that Russia and France can be difficult. Lead bags for exposed film (and loaded cameras or holders too, don't forget), are perhaps indicated in those areas. Always take the lead bags along, just in case. Never assume you can buy anything away from home.

I've found that you can get away with a washable, easily packable bush jacket (safari jacket), a shirt and tie, and decent slacks on almost any occasion. Women can substitute appropriately for the above but will also need a pair of suitable shoes. The comfortable bush jacket (Bean, Bauer, etc.) with its many pockets, also serves admirably while in transit and when photographing.

Packing: You can pack everything in minutes if you use this method: Buy the biggest zippered duffle bag you can find. (Extra size in a bag doesn't add much weight or any extra bulk; the ends just fold upward and become more shoulder strap.) A red one is easy to spot in an airport baggage jungle. Get six or seven open mesh bags that you can see through. Camping outfitters or an Army-Navy store will have them. Put all your shirts in one mesh bag, all your socks in another, underwear in a third, books in a fourth, toilet kit, tool kit, and medicine kit in a fifth, etc. Bring a plastic garbage bag for soiled clothing. Keep a plastic bottle of

Woolite in it. To pack, toss the mesh bags into the duffle bag. You'll have plenty of extra space for gifts, etc.

Photo-gear: I spoke to John Sexton before I left regarding equipment he took (or wished he had taken) to China. His advice, which I followed, was to take 35mm for the tour we would be going on. He was right, but if I return to China and am able to stay in one place for a while, I will take a 4X5. I carried one small camera bag containing an old Nikon "F" SLR with a 105mm lens and a viewfinder Leica M-2 with a 35mm lens. The bag is for transport only; when photographing I carry just the two cameras and a few rolls of film in my pocket.

The rangefinder Leica is small, simple to use, quiet, and rugged. Rangefinder cameras, to me, are one lens cameras. Though superb with the 35mm lens, they are poor performers with shorter lenses because you need a clumsy stick-on wide angle finder. You focus through one aperture and compose through another. They are annoying with longer lenses because, regardless of the lens installed, you still see the entire 35mm image area. Although the smaller image area of the longer lens is indicated by a superimposed rectangle in the viewfinder, what you can still see outside the rectangle is sure to affect your compositions. You can't preview your depth of field with a rangefinder. This is no hardship with the short lens, but is bothersome with long lenses with their limited depth of field. Worse, with a longer lens such as the 90mm, one third of the image area is obscured by the lens jutting into the viewfinder window. But it is easier

to focus a short lens with a rangefinder camera than with an SLR. Conclusion-opinion: rangefinder cameras are superior when used with the one lens that utilizes the whole viewfinder window.

SLR cameras handle long lenses well. Except for controlled portraiture, a 105mm lens is much too long for photographing people. It pushes you away from your subject and there is no chance that pictures made that way can have impact; no sense of presence or intimacy or involvement is possible. The great combat photographer, Robert Capa, said, "If your pictures aren't good enough it's because you aren't close enough. You must be part of the event." Most of the people on the trip used lenses that were far too long because it's comfortable to stand back there and fire away. But study the great pictures of the FSA photographers, Gene Smith, and Paul Strand and you'll see they were invariably made with short lenses and from intimate distances. At workshops we say, "get as close as you possibly can, then take two steps forward."

The split image screens with which most 35mm SLR cameras come equipped are abominable. You have to tilt the camera just so to avoid the image blacking out in the tiny split image area, especially with lenses longer than standard. And you have to find a straight line at right angles to the split image line to focus on and by the time you have done all that the subject has probably fled. Most manufacturers will sell you a useable screen to replace the unuseable screen they sold you in the first place. I like the microprism

screen with the groundglass surround. It seems to light up the subject and never blacks out.

I learned that the XP-1 film I had previously mentioned was not archivally stable so I brought 20 rolls of 36 exposure 35mm Tri-X film. I exposed nine rolls. That doesn't sound like much, but if you are more used to 8X10 cameras than 35mm cameras, 300 exposures is a lot. Of the nine rolls exposed, eight were exposed with the 35mm lens and of the better pictures, all were made with that lens except one posed portrait.

The trip was wonderful. The horror stories I'd heard proved unfounded. The food was excellent, the hotels were clean and cheerful, the transport was on new buses, the organization was excellent, and everyone stayed healthy. The guide, Mr. Wang, an exceptional young man, spoke perfect English. He did everything he could to make our trip enjoyable.

The Chinese people are cheerful, energetic, cordial, curious, and extremely polite. Attempting to tip them is an insult; you are an honored guest. There were no restrictions on our movements and we were allowed to photograph everything except some ancient warships. Contrary to what I had heard, the people like to be photographed. The Chinese adore their children and it's not difficult to see why. They are exquisite; perfect little dolls. Their parents are so proud of them that they hold them up to be photographed.

The trip was more exciting in all ways

than I would have imagined and I hope to return to explore other areas next spring. If you would like to come along, drop me a note and I'll keep you posted regarding itinerary and dates. I'd especially like to see something of Mongolia.

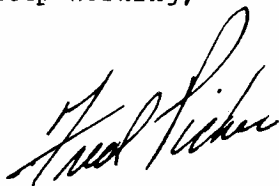
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There is a wonderful new magazine called Vantage Point. It contains no advertising; just beautiful photography, exquisitely reproduced. It is published bi-monthly and is a terrific bargain at \$45.00 a year. By itself, the Brett Weston portfolio in the first (current) issue is worth the full subscription price! This publication merits the fullest support of every serious photographer. Order from: Lepley Publishers, 362 Pacific St., Suite 1, Monterey, CA, 93940.

*

In the last Newsletter I requested help in the comparison of lenses for cameras of different formats. I received more, and better, information than I expected or have room for, so I'll save it for the next Newsletter. I'll also describe two fiendishly clever new devices from the diabolical brain of the incredible Dr. Horowitz.

Keep Working,

A handwritten signature in dark ink, appearing to read "Fred Fisher". The signature is fluid and cursive, with a large, sweeping "F" and "S".

ZONE VI Newsletter

Number 40, September, 1984

"The richness of the experience that occurs when one is exposed tangibly to a subject, material, or process is unmatched in the abstract, via paper analysis or description.

Thus, when 'touch it,' 'taste it,' 'smell it' become the watchwords, the results are most often extraordinary. Equally extraordinary are the lengths to which people will go to avoid the test-it experience."

In Search of Excellence, 1984
Peters and Waterman, Jr.

HC-110 is now a bright yellow. I asked the man in the camera store if the change in color meant anything and he said he hadn't noticed any change in color. I called the tech rep at Kodak and asked him what was going on. He explained that the only change was cosmetic and that it had taken place because the old formula sometimes turned very dark and people returned it. I asked if there were any other changes and he told me that there were "some improvements," it was "cleaner" (had it been dirty?) and had an "improved formulation."

I have learned not to trust tech reps, photo writers, the man in the camera store, or other photographers. Reps pass on what their boss tells them to; writers employ a process by which they attempt to make both ends meet: They appease the advertisers and confuse their readers. The man in the camera store says whatever comes to mind, and photographers guess. No one ever TRIES anything to see what actually happens. Either they have no idea of how to go about it, they're too lazy, or they realize they wouldn't know the difference.

Recently we were asked to submit Brilliant paper to review by two publications. The first publication didn't want any paper to try; they had no darkroom. They just wanted a list of "specs." (The manufacturer supplying the best specs wins?) "Specs," except the D-Max, are completely meaningless when it comes to paper. Because the print must produce an esthetically satisfying result in areas that have no scientific counterpart; richness, brilliance, depth, gradation, tonal separation, atmosphere, you have to LOOK AT AN ACTUAL PHOTOGRAPH printed on it. That's what paper is used for. What are the "specs" for a bottle of Chateau Lafite Rothschild, 1966? A fifth of a gallon of grape juice containing twelve percent alcohol by volume? Is a Degas ballerina a pound of canvas and five ounces of paint? The other publication wanted a box of 11x14 grade 2 to test. Why 11x14? Why only

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grade 2? I suspect someone had some work to do and needed a free box of 11X14 grade 2!

To test a product you must have something to test it against and you must devise a test where every condition is constant, except the things you are comparing. To test the new HC-110 against the old I first needed identical exposures. Because different is not the same, and even an identical shutter speed might vary from one exposure to the next or the light might change between exposures, I decided to use the same negative for both developers. Here's how. I made in-camera exposures on four 4X5 sheets of film. My test target was a smooth, evenly toned surface and I placed the target value on a different zone for each negative. I also made a landscape photograph. Then I made up three quarts of old HC-110 dilution B and the same amount of new HC-110 dilution B and put them in adjoining trays. I put both trays in a water bath tray to keep the temperatures the same. I made up the usual stop bath and fixer trays. Lights off. I unloaded the films and cut them in half with a scissor. The halves with the notches were developed in the old HC-110, the other halves in the new. I developed all films simultaneously; the right hand working one tray, the left working the other. The agitation was identical because both hands automatically make the same motions at the same time. The negative exposures, developer temperatures, development times, and frequency and degree of agitation were identical for all films; only the developers were different.

After washing and drying, the densities

were read on the densitometer. Here are the results of Tri-X sheet film developed in the new HC-110 compared to the old:

	Old HC-110	New HC-110
Base & fog	.08	.08
Neg. #1	.18	.15
Neg. #2	.95	.86
Neg. #3	1.10	1.00
Neg. #4	1.18	1.06

As you can see, the progression of increasing densities is not parallel; in other words, the differences in density are more pronounced in the higher values.

Incidentally, we get a lot of mail asking whether there is a good cheap densitometer or whether you can make one out of a meter, etc. We paid \$2,000.00 for ours because that's what a serious one costs. Toy densitometers give casual information; the only thing worse than no information.

Richard Ritter of our office has also made tests and tells me he found that negatives developed in new HC-110 are the same as negatives developed in the old HC-110 if you use 25% more concentrate. In other words, an ounce and a 1/4 to 31 ounces. There are only two possibilities; he's right or he isn't. Dilettantes will take Richard's word for it or, more likely, pay no attention to the whole thing. Writers will write that both developers are the same (because Kodak told them they were), unless they read this article in which case they will recommend you "make your own test." They will not attempt to describe how to do it because they haven't the

slightest idea of how to go about it or what they are looking for. They leave the details to the reader.

Picker says the new developer is slower and has less contrast, but everyone else says it's the same as the old. What are you supposed to do? If I were you, I wouldn't take any one's word for it; if you were me, you would make your own test. Real photographers will do it right. They'll find out what they need to know.

They will start at the beginning and make a film speed test and a development time test. Once they have done that, photographs are the only way to determine whether the new developer has lost anything in other more esoteric, more important, aspects. Suppose it has lost more important attributes than a bit of speed and a change in contrast, both of which can probably be overcome with lengthened development time or increased developer concentration? Suppose Tri-X negatives no longer deliver prints with that wonderful feeling of space and substance and light. Then what? We will have the odious job of searching out another developer to replace this "improved" one. If they improve Tri-X the way they did Kodabromide, Azo (which was improved right out of existence), etc., we'll really have a job to do.

I called Kodak after making the tests and reported the results to a rep. I told him I was going to publish the results and he switched me to his boss, the "Coordinator of the Film Group." The coordinator, after hearing the results, of my test said, "There

is some compression there, but the average person wouldn't notice it." He was going to speak to HIS boss and, as they say in N.Y. and L.A., "Get back to you." They did, and requested that I send the two bottles in question back to them for testing. I did so with some trepidation because I am leaving on a trip to Greece and the Hebrides on September 19th and I certainly don't want to develop those negatives in anything I have not thoroughly tested. They promised to find me a quart of the old stuff to replace the quart I sent. In the next Newsletter I'll tell you what transpired at Kodak and the results of further tests on my part. I hope that one of the bottles I sent Kodak is found faulty or unusual, as Kodak believes, but I have doubts. Dave Usher, one of our workshop staff members, advised that, though he had not tested it scientifically, he had the definite impression that his bottle of new developer was "weak."

*

Here is a chart which matches the horizontal angle of coverage of the various lenses. There are several ways in which the different shapes of the various formats can be compared, but it seems to me that it is the horizontal angle a photographer cares most about, not the diagonal or the vertical angle. Where the theoretical lens lengths were close, such as the 27mm for 35mm cameras and the 90mm for 4x5 cameras, I took the liberty of changing a mm or two to include lenses, such as a 28mm, that is actually available. In those instances where it was too far to stretch, I left the numbers alone. I rounded the horizontal angles of coverage to the

nearest degree.

Horizontal angle of coverage (°)	35mm	2 1/4 Sq.	6X7	4X5
77°	24mm	34mm	43mm	75mm
65°	28	40	55	90
53°	35	55	69	120
43°	45	70	86	150
31°	63	96	105	210
22°	90	135	180	300
19°	105	160	201	360

For 8X10 cameras, the equivalent lens length is twice that of a 4X5.

Lens lengths can usually be "adjusted" in the field to cover the desired subject area by the simple expedient of moving the camera position forward or back. When in doubt about which lens to buy, I would tend to favor the slightly wider lens because you can usually move closer. If you can't, you can always crop slightly to duplicate the field of view of a slightly longer lens. With a lens that is too long to cover the desired area and no room to back up, you are out of luck. Lenses wider than 35mm on a 35mm camera or 120mm on a 4X5, however, change the shape of objects located at the edges and corners of the frame and produce a decidedly "wide angle" look. But for commercial work in tight quarters I am often forced to use the 90mm on the 4X5. I can't remember when I last used it for personal work.

When Ansel Adams advised me on equipment in 1968 he told me to get a 210 Symmar and a 121 Super Angulon. (The 121 is now a 120; I don't know why.) I have found that those two lenses on a 4X5 will permit me to photograph

just about anything anywhere and I could not work comfortably without either of them. Together they account for at least 90 percent of my 4X5 pictures.

*

In China I used a lens-hood appearing gadget that has a mirror in it so that you can photograph at right angles to the direction the lens is aiming. Paul Strand used a similar approach in his New York and his Mexican portraits. He screwed a large inoperative lens to the side of his Graflex, aimed it down the street, and photographed the person on his right. The people he photographed are always looking either at the photographer or down the street at what he seemed to be photographing.

*

Some years ago I wrote about an arrangement of metal strapping glued to the back of a lens board to which gel filters could be held in place by a small magnet. This works well for large lens boards, but for the small Linhof boards, as are used in our field camera, there isn't enough room. I just hold the gel in front of the lens. Gels are so thin that distortion does not occur. I make a frame sandwich out of thin cardboard; the material used for file folders is fine.

*

The inside surfaces of view camera lenses can be cleaned without having to send them to a repair shop. Merely unscrew the lens as you would open a jar and wipe the inner surfaces

clean with lens tissue. There is a retaining ring that holds the front element of the lens to the board and you can leave that in place. If it should loosen up at any time, just hold it in place as you screw in the lens. You don't need any special wrench if you do it that way. I find the lens seems most conveniently placed on the board if the shutter speeds are near the top.

*

In the last issue I mentioned a new device invented by Paul Horowitz. It may already be known to you if you saw our last catalog. It is the "Tiktok," a compensating metronome timer. It uses the same photo-cell that our stabilizer uses, and plugs into the enlarger head in the same way. It beeps at about one second intervals (adjustable to your taste), and delivers identical exposures regardless of fluctuations, from any cause, in the light source. It does so by adjusting the time between beeps to compensate for any changes in light output. If you start to make a print before the head is warmed up, the metronome might beep every three or four seconds. After a few minutes, the beeps might be only a second apart, but the two twelve beep prints will be identical. The Tiktok will handle any size or power of light, both tungsten and cold light and it serves as both a stabilizer and a timer. That's the good part. If you print with a metronome, there is no bad part. If you print with a timer, it might take some time to learn to print with the metronome. Because our other stabilizer changes the intensity of the light to keep the output constant, it can be used with a timer.

In Ansel Adams' book, "The Print" he describes his use of the metronome; he never used anything else.

Though I have always printed with a timer operated by a foot switch, if the Tiktok had become available before the stabilizer was invented I would have switched to a Tiktok in order to enjoy the luxury of identical exposures. I think I would have tried to use it this way: I would use a foot switch to turn the light on and off. Zone VI has just gotten a supply of heavy duty foot switches that will do that. If you would like one, send \$25.00 and ask for a "Tiktok foot switch."

You can also use a timer as an on-off switch for the Tiktok by using the "focus" switch to turn on your light; Ansel had a little toggle switch on his counter. But my hands are usually full of dodgers and cards and I think I'd prefer the foot switch.

You can print in three second bursts, as I do, by hitting the foot switch, counting three beats, then releasing the foot switch. Whether the beats are actually a second apart is immaterial; three beats will always give you the same exposure. Ansel would hold a card under the enlarger lens, turn on the cold light, listen to the rhythm of the beeps and, when he was all set, pull the card away. When the exposure was complete he'd slip the card back under the lens and then shut off the light. The metronome would keep going. It would drive most people mad. (The Tiktok stops beating when the light goes off.) The time required to slip the card under the lens and remove it is inconsequential for exposures of

normal length, say 20 to 30 seconds.

Your exposures will be identical if you start counting on the first beat because the exposure time before the first beat is exactly the same as the time between beats. If you have a better way of using a metronome than the foot switch method, let me know and I'll put it in the next Newsletter. And I'll send you a box of the most elegant paper you ever printed on. The first Brilliant from the new coating line is in and I've never seen anything like it.

*

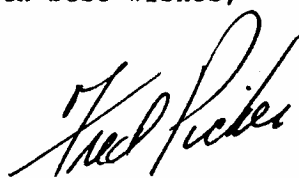
In the last Newsletter I recommended support for a new publication called Latent Image. Though their first issue was an artistic success, it was a financial disaster. Those who subscribed received a notice of bankruptcy. Those who didn't, shouldn't.

*

This has been a year full of color and adventure for me. I have been to China, visited France between workshops during the summer, and this week I'll be going to Greece with Carol and Paul Horowitz. Paul has to get back in two weeks so I'll leave them in London and fly up to Stornoway, Isle of Lewis, in the Hebrides. Places and objects can create an atmosphere that stirs some longing or reminiscence of a past you may think you never knew. Many people who have visited Vermont for the first time have told me that they felt at home immediately. It's like that for me in the Hebrides. Part of that feeling is for the stark

beauty of the land, the sea, and the people. Part is surely because I constantly think of Paul Strand, the man and his work, when I am there. He made the pictures for "Tir a Mhrain" on that very ground and that makes walking the beaches and meandering among the lochs and stony pastures a particularly moving experience for me. Why do I find Strand's photograph of a few aged horses on a lonely beach in Uist nearly unbearable to look at? I wonder if it is because there is such beauty and such sadness in knowing, in completion. Strand's photographs are more complete than any I know; they quietly contain no less than the experience of the human condition. Strand's pictures are at rest within the frame -at rest in a space charged with a dense and complex life of its own. The longer you look at them, the more they reveal. They are about our lives as they usually are, about what our lives might be, and about death. For me, his photographs share a place with the late quartets of Beethoven. Both men, I think, attained in themselves the highest point of human understanding and, in their work, the highest point of human accomplishment. A year before his death Strand said, "The world is such a complex of marvelous things, and if you can find a way of using that complexity in your work, then it's endless. What counts for the artist is to do something he's never done before. That's what stretches him, makes him grow."

With best wishes,

A handwritten signature in dark ink, appearing to read "Fred Pickers". The signature is fluid and cursive, with a large, sweeping initial "F".

ZONE VI Newsletter

Number 41, December, 1984

Think small. If you have a big mind, that will reveal itself. If you can't think small, try philosophy or social criticism.

The Triggering Town, 1979
Richard Hugo

To develop sheet film with the ubiquitous Galab timer is not a pleasant experience. With a wet hand dripping developer down its rusty face, you start it counting (backwards) by moving the minute hand, notch by notch, to the right. You hope you moved it five notches, because you can't see it. (You develop sheet film with a card taped over its glowing face and hope the minute hand doesn't catch on the card as it goes around.) You have to peek under the card every now and then to see what time it is as you lean over the tray of films in a sometimes vain effort to protect them from the glow. If the card falls off, throw your body over the Galab or the developer tray, whichever is most accessible. For both prints and film, as the final time approaches, try to remember what time you actually set the timer for. You might have decided on five minutes, but actually set four or six in error or because the minute hand was inadvertently set between the closely spaced minute detents and hopped either to the four or the six position. Timing errors are inconvenient when developing

a print, but usually disastrous when developing film. There's no way to know the elapsed time for sure with a Galab because it always reads zero at the end. Why use a Galab, then? Because in spite of its faults I, like almost everyone else, hadn't found another developing timer that didn't have other, worse, faults.

About two years ago, I started bothering Paul Horowitz to make us a developing timer as good as our dry-down enlarging timer. (By the way, because our dry-down timer repeats the dry-down feature of the stabilizer, we are introducing an identical heavy duty timer for those who have stabilizers. Identical except that it is missing the dry-down feature and therefore costs less; \$98.00 plus \$25.00 for an optional footswitch.)

I asked Paul for a print and film developing timer that had the brains to count forward instead of backward, that would beep every thirty seconds (softly) to remind me to agitate or to check the elapsed time, that would have a digital display that wouldn't fog film and could still tell me in the dark how many minutes had passed for sure (instead of a hand position somewhere between two and three minutes or is the hand between three and four minutes?) And I wanted a conveniently located, electrically safe switch with which I could start the timer with a wet hand without fear of electrocution. Better yet, how about a foot-switch to start it with? In addition to a

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precise, readable display that wouldn't fog film, I wanted the clock in a convenient-to-see location, remote from the switch.

Paul said he was busy with something having to do with outer space. I think the simplicity of the whole idea bored him.

Then one day I told him that I was getting varied print densities on long runs of the Zone VI "Fine Prints." I knew the stabilizer was stabilizing properly because each batch of ten prints developed together was identical. The batches differed from each other. And because I use three gallons of developer and dump it after every fifty 8X10 prints, the varied densities could not be blamed on developer exhaustion. We figured that it must be the lack of stability of the developer temperature. In my darkroom the air temperature in winter is apt to be 65° and in the summer it might be as high as 80°. Worse than that, even if the starting solution temperature is the same as the room temperature, there will be changes of five to ten degrees during the printing session because factors other than room temperature affect the solution temperature. These include evaporation, not only of the solution but of moisture on the outside and underneath the tray, water of another temperature running into the sink from the holding tray, hands in the developer, the temperature of the paper, and who knows what else? Try this: take a temperature reading of your darkroom, make up your print developer at the same temperature, start printing and after an hour check the temperature of the developer again. Expect a big temperature change. And because it takes more than an hour to make a fine print, the exposure time indicated by test strip and pilot print at the beginning of a session becomes

obsolete. By the time you get to the final print you need a new exposure time. That's very annoying and hardly conducive to your confidence, peace of mind, the creation of a relaxed attitude, or the production of the best possible print.

I made some tests and found that even a small change in developer temperature had a big effect on the appearance of the print.

So I told Paul we needed a machine that would keep the developer temperature constant no matter what. We needed a developer temperature stabilizer. (If I couldn't get a timer, maybe I could get a temperature controller.) He told me my way wasn't the way to solve the problem. A combined refrigerator and heater would cost too much, be enormous, wouldn't react quickly enough, etc. He loves to tell me that my way isn't the way to solve something. But it actually is, because he got interested.

He gave me the onerous assignment of making the dumbest bunch of prints since Niepce wrestled the first image onto a glass plate. He had to know the exact developing times it took identically exposed prints to provide the same appearance (density) at various developer temperatures. I devised a test. The first step was to make a control print. I inserted a normal negative half way into a carrier, letting white light shine through the other half of the carrier. After opening a new box of paper -nothing is worse than getting half way through a test and then finding out you can't complete it with the same batch of film, paper, developer, etc.- a test strip print showed that an exposure of the white light area of the paper for one second would result in a gray of

about print value VI. For the rest of the paper I needed five more seconds to get a proper exposure for the landscape area. So after a one second exposure of the whole print, I covered the exposed white light area of the paper with a card. Then I exposed the part of the paper where the negative was projected for five more seconds. When I developed the print for two minutes at 68°, my base development time and temperature, I got a print half covered with a pale gray area and the other half with a nice landscape. That was my standard control print.

Then I exposed several dozen sheets identically and put them in a drawer. I heated the developer to 80° and marked the backs of four exposed prints: "80°, 30 seconds," "80° 1 min," "80° 1.20," "80° 1.40," dropped them in together and pulled each sheet after its allotted time in the developer. Then I let the developer cool to 75° at which time I tried four more prints and so on all the way down to 60°. At sixty degrees my guesstimate was way off and I needed another attempt at very long times. I used two stainless steel half gallon graduates full of steaming water to get the temperature up, a plastic bag of ice to get it down. The developer temperature was taken just before and just after each group of prints was developed. When there was a variance, an average was taken. At every temperature, I'd start with four prints that I felt would make a useful bracket. When the control print indicated that the correct print development time fell between two prints, I'd make another pair. For example, if the one minute print looked too light and the one minute thirty looked too dark I'd make a one minute ten and a one minute twenty. Sooner or later, I'd get a close match.

The control print was kept in a water bath so I would not have to compare a wet print with a dry one, and estimate a dry-down factor. I had enough trouble just getting the developer to the various temperatures and holding it during the various development times. It rather dramatically illustrated the whole problem of temperature control.

I ended up with about thirty prints. After the prints were washed and dried the gray area of the pilot print was measured with a reflection densitometer. The grays of the other prints were checked for a match and then the photographic areas were viewed for changes in quality or contrast. I was surprised to see that there is no difference in the appearance of a print developed for three and a half minutes in cold developer and one developed for forty seconds in warm developer. Try it. Longer development than four minutes, depending on the paper and the developer, might give you fog. Shorter development than forty seconds might give you mottled skies.

Paul fed the data from the matching prints to his homemade computer. This frightening machine haughtily snapped out, for the very first time, the time-temperature chart for paper development. (Although there are time-temperature charts for film development, I have found no published charts for paper).

How serious is a slight change in developer temperature? Very. To make identically exposed prints match a 68° two minute print, at a developer temperature of 60° you have to develop it for 3 minutes 28 seconds, at 75° you have to develop it for 1 minute 14 seconds and at 80° you have to develop it for 52 seconds. Try it.

Now Paul could design the circuitry for the timer. It has all the things I originally asked for and much more. It has a long wire with a thermistor on the end. A thermistor is a kind of electronic thermometer. It is smaller than a grain of rice and it reacts to temperature changes now. It is accurate to within one tenth of one degree. It constantly monitors the temperature and continuously adjusts the rate of the timer to compensate for changes in developer temperature. As soon as I got the prototype timer from Paul, I exposed four sheets of paper identically, developed one for two minutes at 68° (at 68°, real time and compensated time agree), developed one for "two minutes" at 60° (three and a half real minutes), developed one for "two minutes" at 75° (one and a quarter real minutes), and the last print was developed at 80° for less than one real minute. The prints matched to the eye and the densitometer showed they all had a gray area density of .42 to .44. They appeared identical. I was delighted. Paul wasn't. He made me buy various brands and types of papers to make sure his curve would work for all of them. For the first time I even had some R.C. plastic greasy kid stuff in my house. How can anyone print on that slime? You'd have to be blind. There are people who buy cold lights -to improve print quality I assume- and then print on variable contrast or resin coated "papers?" Believe it. Incidentally, the two new Kodak fiber papers contain brighteners. These are the same brighteners found in laundry products and I assume they are added in a thrifty attempt to achieve the brilliance of a true .05 density white (and very expensive) paper stock. You can quickly spot brighteners in a print because the high values glow weirdly. What you can't see is the rapid deterioration of the print that brighteners cause.

The timer worked perfectly at four different temperatures on six different papers. Because all the papers I tested share a common time-temperature curve, I assume that, like film, the curve is the same for all papers.

In a pathetic attempt to gain the upper hand, I told Paul the whole project was an exercise in futility because the machine wouldn't work for film. (Kodaks published film curve is less steep than our paper curve. That means that a change in temperature will have less effect on film than it will on paper.) No problem. Paul, this time guided by Kodak's curve, designed and inserted a second set of circuitry. Good. Kodak had done all the work for me on this one. When the machine came back Paul had tuned out the invisible .02 difference in the paper densities and added a new knob with labels that read, "actual time," "compensated time, paper," and "compensated time, film." When you switched from "actual time" or "paper" to the "film," position, the amount of light from the digital display automatically dimmed to half brightness. Wise guy. I tested it and was delighted to find that it fogged film at a distance of three feet. When I informed him of his poor planning, sloppy procedures, general lack of adequate knowledge concerning the simplest basic characteristics of light sensitive materials, etc., etc., he had no choice but to add a control that allows you to dim the display all the way down to zero. He never would have thought of it. I was delighted to have had the opportunity to guide him out of his dilemma.

To check the film curve circuitry in the timer, I made a test strip "print" on a sheet of 8x10 film under the enlarger. You put the film in the easel by feel because no safe light

is safe for film. After development, I ascertained that an exposure of .3 of a second at f/45 gave me about a Zone V or VI density. I then exposed another sheet for .3, cut the film into four parts and put them in a light tight box. After turning on the lights to adjust the developer temperature, I removed the first sheet from the box and developed it at 80° for "five minutes". The next sheet was developed at 75° for "five minutes," the next at 68° for "five minutes," and the last at 60° for "five minutes." Because of the possibility of uneven light fall-off at the edges, I measured each sheet at the corner that had been closest to the center of the image area. If Kodak's curve was accurate, they would all have the same density but the densitometer showed that they didn't. Kodak's curve for film is not steep enough. That helps explain summer negatives that had to be printed on grade 1 paper and winter negatives that needed grade 3.

With the actual densities of my four test negatives to work with, Paul was able to plot the proper curve and then change the circuitry to the theoretically correct one. The next test was right on the button. The film densities matched regardless of developer temperature. "OK Paul? Am I finished?" "NO, try other kinds of film..." I did. In sheet, roll, and 35mm, Plus X, Pan X and two Ilfords, they all matched. Kodak's literature also indicates that all films share a common time-temperature curve.

If you think temperature changes during the relatively short period of film development are apt to be negligible, as I did when I

started this whole business, this will be informative: when I started my film developing test of the first sheet, the darkroom temperature was 65° and the developer temperature was 68°. At the end of five minutes, in spite of the 65° room temperature, the developer temperature had risen to 72°! In the summer it might have gone to 76° or more. The heat of your hands in three quarts of solution makes that much difference. If, like me, you have had the experience of a group of films developed together exhibiting either harshness or weakness and wondered why, the chances are good that they received incorrect development because of wandering developer temperature. During the tests I learned that, contrary to what I had heard, a holding tray serves no function except to keep all solutions at the same temperature.

For roll film I put the developing tank and all solutions in steel graduates in a holding tray so all chemicals would arrive at the same temperature. Then I put the thermistor in the tray. For sheet film and prints, I put the thermistor in the developing tray. We had a special casting for the thermistor made up to hold it in place. It contains an ingenious magnetic switch that you turn on with a large lever. You can also turn it on with the foot switch. For triple safety under wet conditions, the magnetic switch is low voltage, double insulated, and completely sealed in epoxy.

This timer completes a group of precision instruments that has brought the techniques of the photographic process to a new plateau of refinement. For the first time we are able to achieve precise exposure of the negative (Paul's meter modification), precisely controlled development of the negative (Paul's

developing timer, film mode), precise exposure of the paper (Paul's stabilizer and compensating metronome), and precisely controlled development of the paper (Paul's developing timer, paper mode.)

Does everyone need this remarkable instrument? No. Lots of good pictures have been made up until now without benefit of one. I'm the only photographer who has ever had one! But I've used it for a year and now you could no more get it away from me than you could my meter or stabilizer. Time marches on, better ways are found to do things. Imagine, Henry Ford never heard of a computer and now every business of any size has one. Half the kids have one!

We have started production and expect to have timers ready to deliver in early 1985. It will cost a lot, probably more than \$200.00, but even without the thermistor feature, it's the best timer I ever saw and it is designed and built the way we build everything; to last the rest of anyone's life.

Over the years I've gotten some negative mail relative to "commercialism" when products are described in the Newsletter. On the assumption that there are others who agree with the writers but don't bother to write, I would like to respond. A conflict of interests exists, that's a fact, and there isn't anything I can do about it except be sensitive to it. But the tools of photography are part of the process and during their development new techniques are sometimes discovered that are helpful in the production of fine work. We learn not only how the photographic process works as we develop the tool, as was the case with this timer, we learn the way someone like

Paul approaches problem solving in general. His techniques are classic and have universal application if we apply them.

Would I write about a meter like ours if someone else invented it? Absolutely. It's a marvelous new tool for photographers. For the first time the Zone system really works every time. For the first time the photographer can predetermine print values regardless of conditions. And, during the development of the meter, what I learned about exposure in general, about the way film responds to spectral qualities of light, light intensity, and color of subject matter was important. These aspects of exposure were either unknown or never, to my knowledge, discussed in the photographic literature. The stabilizer? Of course I would have described it no matter who made it. I found that not only the machine, but also its development was fascinating. I learned a lot from Paul Horowitz about method, about how to find out what you need to know in a scientific way instead of the usual floundering about that most of us do, and about relentlessly staying with a project until you have it beautifully solved. The philosophy has affected my work. To work with someone like Paul is a fascinating experience and if I can share that, I think I should. So I hope that my description of the methodology he employed in the development of this timer will be as interesting, useful and educational in your approach to problems solving as it was for me.

With best wishes for a happy new year,

A handwritten signature in dark ink, appearing to read "Fred Picker". The signature is fluid and cursive, with a large, sweeping "F" and "P".

ZONE VI Newsletter

Number 42, March, 1985

Last summer at Yosemite I lent a boy my 4 X 5 camera. He said, "What do I do with this now?" and I said, "Unscrew it and find out for yourself." Why shouldn't he learn how to collapse a camera? Why should I teach him that? You mustn't treat a child as if he's a nitwit; tell him something and let him go at it. I don't believe we do enough self-education.

Interview, Imogen Cunningham Dialog with Photography

The search for the magic art-producing film-developer combination continues. I'm satisfied with the film I use and have no interest in following up on suggestions of photographic writers or the the man in the camera store. But very occasionally, when someone with the expertise of a Chip Benson speaks well of a film, I try it. I found no fault with the XP-1 Ilford 35mm film recommended by Chip but I've heard that it isn't very archival.

A product might be just the thing for someone doing a certain kind of work or whose taste in print values leans a certain way but be useless to another equally accomplished photographer. The answer is, "try it."

Most people, too lazy to try it, ask other people who haven't tried it, but have a theory. Most people haven't a clue as to what they are looking for, have no idea how to find it, and wouldn't recognize "it" should "it" appear. But my mail indicates that there is much interest in testing films. If you can define your problem and would recognize a solution, here's a way to test a film.

Choose a clear sunny day. Load a camera with your present film. Let's assume it's Tri-X. Tripod the camera because even a slight change in camera position will change the subject reflectance angle relative to the camera position and alter the negative densities. Also, hand-holding the camera will produce varying amounts of camera shake which will make one film appear sharper than another. To digress: I swore off my addiction to errors in the photo press because there were too many to edit, it was bad for business, (lousy ad positions), got me disliked by editors, etc. But circumstances alter cases and here are two jewels I was incapable of passing up: Barry Rothman, CA. found this one by David Vestal in Popular Photography, February, "The tones that matter in most prints fall between the paper's white and its black." (And the tones that don't matter -in those other prints- fall where?) And Ken Brown, CT. sent this one by Nancy Engel in Popular Photography, March, "Since trees are often moving in a breeze and Peril wants to eliminate the chance of blur caused by motion, he always mounts his camera on a

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tripod." (That will keep those dern trees from moving!) A box of paper to both of you but please, no more. I'm in trouble enough.

If you don't have one of the new subject-freezing tripods, aim at a still subject. The photo testers (more trouble) usually test films using a pretty lady as typical subject matter. More fun than a woodshed, but not a good choice for the purpose. False information will result if you test film using a live model because slight changes in the subject's position will alter the lighting and slight changes of expression will affect objective judgement of print quality. Movement during one of the exposures would affect the sharpness of the print. If you're testing film; the only variable should be the film.

My regular test target for film and chemicals is my south-facing woodshed door, the areas around it, and the area inside it. The high value is the shiny white painted frame around the door which, on a sunny day, reflects light straight back at the camera. It is placed on Zone VIII. The next lower value is adjustable because, though the door is painted the same shiny white as the frame, I can swing it to various angles to reflect progressively diminishing amounts of light. I swing it to a Zone VII position. There is gray painted siding (V), glass panes in the door (IV), a black roof (III), and the log ends seen through the door fall on zone I. All areas are large enough to meter precisely and evaluate easily in the print. Because all areas, except the roof and the log ends, are seen both sun lit and in shade provided by the roof overhang, there is a great variety of smooth, evenly illuminated tones.

After you have found your target, 1) Put the lens cap on, set the minimum aperture and the maximum shutter speed, and "expose" two or three blank frames. Sheet film users should develop and fix a sheet of each film they are testing. 2) Remove the lens cap, set the meter at manufacturer's ASA rating, meter the high value, place it on Zone VIII and expose. This goes against the usual dictum of "expose for the shadows, develop for the high values" but I think you will soon see why this makes sense for testing the qualities of a film. 3) List the other reflectances and the zones they fall on. List the shutter speeds and apertures used. Listing of subject values for all photographs is valuable when learning technique. For testing, it is essential. Data is most quickly and dependably organized if you use an Exposure Guide. The two I know of are by Ansel Adams, and Zone VI.

4) Make a one stop overexposure, 5) a two stop overexposure, 6) and a one stop underexposure. For 35mm, repeat that sequence of four exposures through a 36 exposure roll. For 120, use 220 or two rolls of film; 120 film isn't long enough. If you're testing sheet film, make three sets of the four exposures.

Now re-load the camera with the second film (or the same kind of film again if you are only comparing developers), reset the ASA on the meter if the film is rated differently, and make the same series of exposures. This is a far different procedure than loading a roll into the camera, going out and making a bunch of negatives of various subjects exposed at the manufacturer's ASA index and developed for the manufacturer's suggested time, then loading up another roll and going back out again to photograph whatever comes along.

To make a meaningful comparison of two films you must have two negatives of the same subject exposed at about the same time, and with both negatives receiving optimum exposure and development. Then, after making prints as close to identical as you can, you can evaluate the nuances of difference.

After exposure, in the dark, cut the first (manufacturer's ASA) 35mm roll into three equal parts. Put two parts into a film can or paper safe and develop one part in accordance with manufacturer's instructions. Sheet film users, develop one sheet. For 120, cut one roll in half and develop one half. Now develop the second part, or sheet, or half of that manufacturer's ASA group 20% less, and finally the last part 20% more than the manufacturer recommends. Do the same with the other film. You bracket the manufacturer's exposure and development suggestions because if you merely followed the manufacturers directions and exposed, for example Tri-X at 400 and developed it for X minutes, you might have a superb film but it might be under or overexposed and/or under or overdeveloped. You would never know the quality that is there.

Accuracy of manufacturer's specs or recommendations don't matter; quality does. Even fine papers differ in their contrast characteristics, but who cares what number they call it as long as it is fine? I have some of the marvelous, but discontinued Ilfomar, now stored about ten years in a freezer. Ilfomar grade 3 has the same contrast as Brilliant grade 2. My old Varigam is half way between. No problem. I can usually decide in the field which paper I will make the print on and develop my negative accordingly. If I'm not sure which paper will be best, I make two

negatives and develop each for different times. There's nothing nicer when you're hard at it in the darkroom than having a choice of negatives and a choice of papers. Incidentally, one thing that I do very frequently is make two identical exposures of a subject, then develop and print one of the negatives. If I would like a little more or less contrast to fit a certain paper or grade, I then develop the other negative for a longer or shorter time. I can get the most refined negatives that way, custom developed for a fraction of a paper grade.

After the last Newsletter, I got more mail than usual. Most was supportive, a few thought the Newsletter was excessively commercial, everyone noticed it was late (printer's fault, as any publisher worth his salt would say) and a few referred quite rudely to my exceedingly rare meanders from the apparent subject at hand. I was fortunate to happen upon a lovely sentence at the beginning of Fielding's "Tom Jones."

"Reader, I think proper, before we proceed any farther together, to acquaint thee, that I intend to digress, through this whole history, as often as I see occasion, of which I am a better judge than any pitiful critic whatever."

End of (this) digression. Back to work.

If you are using sheet film, number all negatives. I use an architects technical pen (Castell) and indelible ink. It's a bother because it frequently clogs up, but I know of nothing that writes as fine and as opaque. The numbers are pure white on the proofs.

To locate the best negatives from both films, make proper proofs of all negatives on grade 2 paper. (All this effort has no purpose except the improvement of print quality, if you don't use the best paper and chemicals available it will be a waste of time. If you have any poor paper -or poor anything- save your time, save your sanity, throw it out). The base density of the two films will probably be different so the proper proof exposures will be different. Determine the two exposure times for the proofs by progressive three second exposures of the unexposed frames or sheet of film. If your total time is less than eighteen seconds, the exposures are too great for a refined reading. Stop the lens down and try again. Choose the step that is the first black for each film. If you have any doubt, pick the lighter of the two exposures in question. Now expose all negatives for their proper proof exposure times. Cut a two inch square of the same paper you are proofing on, don't expose it, but develop for two minutes and fix it with the proofs. Compare it with the high values in the proof prints. Find those negatives that produced the proof prints where the high value shows slight tone when compared to the two inch square. The proper proofs might reveal several negatives that fit the high value criteria. They might be an 800 exposure with long development, a 400 exposure with the medium development, and a 200 exposure with short development. Write down the frame numbers of the negatives that show a print value of VIII.

Now set the enlarger for the average print size you are likely to make using that film. Put a negative in the negative holder, focus, take the negative out, and replace it with the piece of clear film. Make a test

strip series, pick the first strip that is a useable photographic black. That's the theoretically correct printing exposure. If in doubt, choose the lighter of the two strips in question. There's no harm done if you choose a strip too light as long as you are consistent and choose a matching strip of the other film. Now put each selected negative in the enlarger and give the theoretically correct printing exposure. Be sure you list on the backs of the prints the film, exposure index, and development time of the negative used; "T-X, 400, 5 minutes," etc. Use a soft pencil; a 210mm (8") Mogul f/5.6 #2 is nice. Put the prints in a drawer as you expose them. You may end up with as many as a dozen prints. When they have all been exposed, develop them together for two minutes in fresh everything.

Compare the prints with your notes. The high values should look the same in all the prints because you printed only the negatives in which the high values were proper. Are the other values about where they were placed? Where the middle values fall in the print is not very important to me. I find little emotional difference in a print where a Zone V placement appears in the print at IV 1/2 or V 1/2. The middle values seem to take good care of themselves in any film; it's the top and bottom ends that count, and of the two, the top is a lot more important to the emotional content of the print. This is opinion; many photographers check their development time by matching a Zone V to a gray card or measuring a middle value for a theoretically correct film density. I don't do that because in an attempt to get the V (which I don't care about) theoretically correct, I might get the VIII or a III, which I care a lot about, emotionally wrong.

A Zone III placement should show a strong dark tone in the print; not much detail, but some good printable stuff showing separation and substance. Zone I is a useful sensitometric threshold, but mostly myth in the print. Don't expect to see more than the barest trace of tone lighter than black. If your paper is dead, you'll get mud in the low values no matter how good the low value separation in the negative is. My darkest log ends, which fall on Zone I (the lighter log ends are II or so) appear ghostly, but in evidence. Refer to your field notes. Choose the print from each film that most closely matches the placements of the various values of the subject. At this point you have a normal print from each of two properly exposed and developed films to compare.

What are you looking for? I'd sacrifice nothing for atmosphere. It seems to me that the sharp fine grain films sacrifice plenty in that department. I don't care much about sharpness or grainlessness. Those problems are always caused by using small film to make large prints and are easily solved by using large films to make small prints. And I certainly don't want my prints to be "snappy." I want prints that are rich, smooth, and brilliant; that imply substance. Can I almost feel the wood, warm from the sun, and does the print recreate the quality of light reflecting from the subject? Someone else photographing other subjects than I do and having different ideas about the qualities they want in their prints will have other priorities. This is the time to be an artist, not a scientist. (The difference between an artist and a mechanic is that the artist operates on an emotional level that has no need for evidence). Pick the film that made the print you respond to emotionally.

After you have chosen your film, write down the ASA setting that you used to make the negative that made the chosen print, the developer, and the development time. Start using that film. You may find that it is a terrific film for photographing woodsheds under controlled conditions but not much good for anything else. Maybe it's too slow to hand hold for the kind of pictures you like to make with 35mm. Even for 8X10 negatives, I want all the speed I can get. Long lenses, required for adequate coverage of large negatives, have a short depth of field and must be stopped down in many situations. Even in bright sun, using Tri-X, your exposure will be about 1/15 at f/64. In shade or late or early or in overcast, 1/4 or 1/2 a second will be needed. Those speeds won't stop leaves from quivering or field animals from blurring (unless you have one of those new tripods.)

Perhaps the new film shows remarkable ability to render flesh tones like oat meal. The slow, sharp thin emulsion films like Pan-X often look good in tests of short range subjects of mixed reflectances but are apt to be choppy when photographing contrastier subjects or large areas of graduating continuous tone, such as skies and fields. Pastures or lawns often acquire the look of unevenly worn rugs. Slow films are somewhat improved by a developer such as our X-22 type, but I still prefer Tri-X. By the way, I've found the new HC-110 fine with Tri-X but it requires a longer development time.

Assume you like the film but find, after you use it for a while, that the development time you chose is not exactly right. You will probably be so close that slight trimming up will be sufficient. If you

find yourself printing mostly on grade 3, shorten negative development time. If you find yourself printing mostly on grade 1, lengthen development time. If the high values are OK in a proper proof but blocked in enlargements, you are printing with a condenser head. Right?

*

Odds and ends department. Putney School has a new director who has indicated her intention to reinstate a summer camp and orientation program for new students. That would mean loss of our facility and the end of workshops. I just wouldn't have the heart to try to hunt up another spot, equip darkrooms, teach printing in a darkroom other than mine, etc. So if you were thinking of coming some day, better make it this summer. There are still a few spaces left. Please call 802-257-5161 before sending a deposit.

Paul's compensating development timers are in but won't be in the catalog until fall. There are not enough to go around. Newsletter subscribers will have the first chance but figure to wait about a month. They cost \$245.00 but you can consider them a bargain because they carry our new guarantee: "If, during the lifetime of the purchaser, any item that Zone VI manufactures fails, for any reason, to perform its designed function, send it back for repair or replacement at no cost." ("If I drive over my tripod, or burn out my cold light bulb, will you repair or replace it?" "Yes.") This is not only the most advanced developing timer you can buy, it will also be the last.

There is a marvelous book: "Double Take" by Richard Whelan in which photographs by

different photographers of the same or similar subjects are compared and discussed. The purpose is not to choose "the best" picture; all the pictures are excellent, but to see how two photographers responded to and handled their subjects. I've often wondered how another photographer would handle the subject I'm about to immortalize (mortalize?), haven't you? The book, published by Clarkson N. Potter, is educational and fascinating.

When I was a beginner and I found something I knew was exciting to photograph I'd invariably wish someone competent would come along to tell me how to not mess it up! I also remember the first photograph I ever made where I knew that no one could do it better. For the first time I fully understood what I was looking at, what it had to do with me, and I knew not only exactly what I wanted to say, but how to get it said. It was in Taos Pueblo; two Indian dogs in a sunlit outdoor courtyard, and for the first time I really saw everything. While assembling the image on the groundglass I suddenly knew exactly how wonderful being a photographer was going to be. I've made a lot of "better" pictures since that one, but I've never forgotten the thrill of that first connected experience. And you know, I was wrong about how wonderful being a photographer was going to be. It's better.

With best wishes,

A handwritten signature in cursive script, reading "Fred Richer". The signature is fluid and elegant, with a large, sweeping "F" and a long, trailing "er" at the end.

ZONE VI Newsletter

Newsletter 43, June, 1985

One doesn't pay enough attention. If Cezanne is Cezanne, it's precisely because of that; when he is before a tree he looks attentively at what he has before his eyes; he looks at it fixedly, like a hunter lining up the animal he wants to kill. If he has a leaf, he doesn't let it go. Having the leaf, he has the branch. And the tree won't escape him.

Pablo Picasso from a collection of essays on Cezanne edited by Judith Wechsler. (Courtesy of Donald Zochert, Lombard, Ill.)

When I started "The Fine Print" book I penned, in the third paragraph, a deceptively simple sentence I felt was destined to become not only a milestone, a benchmark, a monument if you will, in the history of the photographic literature but even more important, would provide a philosophy that, when translated into thirty or forty languages, would point the way to greater understanding between the peoples of the earth. The sentence? "Assume you are in the wrong place." The tidal wave of shock, amazement, and comment generated by this deceptively simple but

eloquent and intensely profound pronouncement was somewhat less than the news that the girls of the Bellows Falls Junior High J.V. Field Hockey Team had lost a close one to the Westminster West contingent. The philosophic implications were just too rich, too abundant (I assumed) for assimilation by the peoples of the earth at that time. They weren't ready then. Are they ready now?

Though choice of the most advantageous camera position is no guarantee of photographic excellence, it is one of the more important expressive controls the photographer can bring to bear. In the book which I recommended in the last Newsletter, "Double Take," the most dramatic differences in the pictures of the same subject made by various photographers stemmed from their choice of camera position. Even in those instances where they must have been standing on the same bit of ground, the position of their lenses was inches apart and the resulting pictures were startlingly different.

I heard about a conversation in which John Szarkowski of the Museum of Modern Art mentioned that he could reach into a file of hundreds of Atget prints, pull out any one and it would be a masterpiece. He said that the major element of Atget's genius was, "He always knew where to stand." He sure did. If you study Atget's work you will soon be convinced of the importance of camera position.

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And I remember reading a review of a Paul Strand exhibit in which the reviewer delivered this lumpish observation, "He plants his camera squarely in front of the subject and then gets out of the way." That had a ring to it like "expose for the shadows" and I distrust phrases that ring. So I looked through several Strand books; I have them all except "Un Paese," the Italian one. (If you have two, call me collect). The reviewer was dead wrong. As Strand himself used to say about reviewers, gallery guys etc., "What do they know? They've never done anything." But I thank that reviewer for bringing the matter to my attention. Strand, I discovered, never plant(ed) his camera 'squarely in front of' anything. He was always just a bit off center; his angle ever so slightly oblique. Why? Perhaps he felt that the slight horizontal convergence of the top and bottom lines of structures, etc. toward a vanishing point added movement and life. Perhaps he reasoned that, because the camera is the ultimate voyeur, an indirect glance might be more revealing than a straight-on confrontation. In his portraits, the divergence from a head-on position reveals the influence of the classical painters that he studied.

Exploring this specific aspect of Strand's work was so revealing that I next went through a lot of photographic books concentrating on the corners and edges of the pictures. It was a very exciting experience. I learned that Strand was the best corner man and he often tucked a little joke or a visual contradiction into a corner. Edward Weston used the edges of the frame to form, or complete, shapes and spaces of power and elegance. Both of them were very different, very consistent, and they both paid a lot of

attention to the outer edges of their photographs. I determined that I would too and, as a training exercise, I made many photographs concentrating on the corners and edges and letting the centers take care of themselves. The results were so effective that I now start with the edges and work in.

Second only to locating something I want to photograph, searching out the most effective camera position is, for me, the most exciting, most creative act in photography. I walk around the subject carrying only a viewing filter which I use as a framer, merger seeker, tonal range judge, contrast indicator, abstractor, and lens chooser. If you walk around still subject matter carrying your camera you will soon--too soon--decide it's time to take a picture. Leave it behind, concentrate on the subject and the view point. Think. The camera is the last thing you need.

Because the most effective camera position depends on dozens of visual and abstract considerations, finding it is more often an instinctive than an intellectual act. It can be lost in a flash, so when I find the spot where things seem to come together in some orderly, cohesive, interesting, and perhaps beautiful way, I quickly mark it with my hat, crossed sticks, or an X in the sand. Once the camera position is marked the picture is, for better or worse, just about finished.

Now get your gear, find your marker, and set up. I really enjoy the act of positioning the tripod. I find the final precise lining up is indeed "...like a hunter lining up the animal he wants to kill."

Because I was excited and clumsy and slow

in getting my camera ready, I once missed a landscape picture that would have made me rich and famous. Never again. I made myself take the gear out of the car, unpack, set up, focus, meter, set aperture and shutter speed, insert the holder, pull the slide, and "expose." I put it back in the car and closed the trunk. I did it fifty times in a row by actual count. As you practice you will automatically make improvements in the way you pack your gear and the sequence in which you perform the various set-up operations. I got my time down to less than a minute and, because luck happens when opportunity meets preparation, I'm sure that very soon I'll be rich and famous. If you do it fifty times you will not only solve the problem of personal solvency and gain the love and respect of your fellows, you will have the satisfaction of knowing that you are the one in a thousand who will bother.

Here's my set-up routine. Designate a front tripod leg. That will be the leg that will always point straight at the center of the area you are going to photograph. It will always be the same leg. For my Lightweight tripod I set up with the bubble level at my right; for my Standard tripod which I use for 8x10, the bubble is facing me. If you don't have a similar tripod, refer to a label or put a dab of paint on one leg, etc. The pan and side tilt handles of the head should always be to your right and the fore and aft tilt handle should always aim straight back.

Hold the tripod up so the top of the head is at the level of your eyes. Release the front leg, let it slide down to the ground, tighten the knobs. If the leg doesn't reach the ground, release another section of leg, and another, etc. If the sections won't slide

or you run out of sections before the leg reaches the ground, it's trying to tell you something. (Tech Tip: Except for being too short, the legs will make fine tomato stakes). Place the front tripod leg about 18 inches directly in front of your marker. Now, holding the tripod straight up and resting it on its extended front leg, release the other two legs, drop them to the ground and tighten the knobs. If you have one of those "convenient" tripods that collapses enough to pack into a ladies handbag, you will have to loosen about fifteen joints. Don't extend the elevating column if you have one; it guarantees wobble even when not extended. Once the legs are equal in length, pull the back legs toward you and spread them. Watch the bubble level on the tripod top and you'll know where to stop. If the ground is uneven, level up by adjusting one or more leg lengths while holding the head level, or increase the spread. If you have rigid leg supports between the legs, use of a hacksaw is suggested. Now put your chin on the tripod head, close one eye, and decide whether you like what you see. It helps me to evaluate forms, edges, shapes, and tones if I look through a viewing filter. Squinting helps. Refine the tripod position keeping your chin on it as you make adjustments. Concentrate. Take your time.

Mount the camera. If you're using the Bogen head we sell, make sure the plate is solidly attached to your camera and the "lens" arrow points directly toward the lens. This is by far the best head made but, like most photo gear designed by designers, it could be a whole lot better. The worst designed thing since the Hindenberg is the ball joint tripod head. When you loosen the control knob the camera flops around like a rag doll.

Make sure that when you put the camera on the Bogen head you push the spring loaded lever firmly home. Open the lens, focus, pan left and right. If the edges and corners are weak, don't change the lens; move in. If there's good stuff at the edges that you can't fit in, change to a wider lens. Never move back. Watch the groundglass as you move or you'll put the camera in another wrong place. Adjust the camera height by pushing the front leg forward to lower it or lengthen the leg to raise it. Keep watching the groundglass. Look at the corners, one by one. Look again. Anything happening? If not, it's up to you to find a position where something is. You'll find that if there's a puddle, it's always where you should be standing unless there is thin ice, a cliff, a hole, a barbed wire fence, or a patch of poison ivy. It's a war. The subject is not about to help you take its picture. If you are precise and watchful you will find that in most cases the best camera position is about a half inch wide. Once you have the lens in the right place, it's all downhill. Level the camera side to side always, front to back if necessary to correct for verticals, take a few meter readings and expose. If you have any doubt about exposure or composition or development or anything, make another negative and another until you are positive you've nailed it. Make a spare. Make notes. The object of the exercise is not to save film or win the Zone-System-Hotshot-Oneshot-Previsualization-Postvisualization Award. The object is to get the picture.

For a review of camera movements, there's "View Camera Technique" (\$25.95), or you can request a copy of our camera booklet; it contains all you need to know, you can understand it, and it's free.

Many more kinds of pictures can be made using a tripod than most people suspect. Take a look at your proof sheets to see how many of your photographs made with your camera hand held could have been made with it on a tripod. If you approach your subjects with the idea of using the tripod and abandon that idea only when it becomes impossible, you will be surprised at how often you can use a tripod. The reward is better composed, better made, sharper pictures and better print quality.

Many people think a tripod mounted camera is a slow and cumbersome thing. But consider this. A tripod mounted 8x10 (or any other camera) is actually the fastest gun in the West. For one shot. Here's why: with a camera on a tripod, the photographer has nothing to think about except touching off his shutter. He needn't hold the camera still, focus, compose as he exposes, or most important of all, squint at his subject through a peephole. And a tripod mounted view camera is faster in another way than a hand held small camera whether tripod mounted or not. The camera movements allow a larger lens opening and, consequently, a faster shutter speed. For example, even with a long lens on a view camera I can photograph the turbulent West River (or the white capped Atlantic Ocean) from a foot in front of the tripod to infinity and get the rushing waters razor sharp at any f/stop and shutter speed I choose. I merely "Focus on the Far" with the lens wide open, then tilt the back 'til the near is sharp. But with a 35mm camera and a 105mm lens even stopped down to f/16 (its smallest stop) the depth of field is only from 25 feet to infinity. The foreground would be mush. To get it sharp, even at f/16 the depth of acceptable sharpness is from 4 to 4.5 feet! Even with a

50mm lens on the 35mm camera, at f/16 the depth of acceptable sharpness is only from 4 to 7 feet. It's optically impossible to make that picture with a hand camera.

A tripod mounted camera often provides increased speed, flexibility, and print quality in many situations where it is generally considered unusable. I used to photograph horse shows using an 8X10 camera. Every other photographer I saw at horse shows used hand held 35mm or 2 1/4 cameras. The 8x10 was far easier to use than a hand held camera because, after I carefully set up, composed, and focused on a jump, all I had to do was watch the horses and riders (which I could see a lot more clearly from my position beside the camera than I ever could squinting through it), and just trigger the cable release at the right moment. It was like doing portraits with a tripod mounted camera. That's a luxurious experience for both photographer and sitter because both can concentrate on the other and forget about the mechanics. My pictures were precisely composed and the sharp full scale 8X10 contact prints looked especially elegant when compared to the blurry, grainy, cropped 35mm RC enlargements the exhibitors were used to. In spite of charging \$75.00 a print (instead of \$15.00) I sold a lot more prints. By the way; the most important rule of free lance commercial sports photography is to always photograph polo players instead of frisbie players, yachtsmen instead of tubers. The second; don't worry about other photographers stealing your ideas unless you have found a better and easier way to do something. Better, but harder, won't interest them.

I used to compete with an established pro who always photographed architecture using a

Hasselblad, hand held. Actually, knee held. He would kneel on one knee, rest the camera on his other knee, and look down at the ground-glass. He used an extra wide angle lens so he wouldn't have to point the camera up which would make the verticals converge. If a tall building was the subject, his usable negative area was about a square inch because he was using only the upper half and less than half the width of a 2 1/4 square negative. My negative measured 80 square inches if I used the 8x10 (you can't get as wide an angle or as great a depth of field with the 8x10 as with a 4x5 so you can't always use it) or 20 square inches if I used the 4x5. In either case, utilizing the rising front and the vertical format, neither of which options were available to him, my whole negative area was usable. Though our incomes quickly assumed approximately the same mathematical ratios as our negative sizes, he remained steadfastly loyal to his inadequate camera, his wobbly knee, his greasy RC paper and his diminishing net worth. To date I've been blessed with nice lazy competitors who are sure that the difference between adequate and excellent is negligible. May their tribe increase.

The tripod is the instrument with which you fix not only your physical but your creative viewpoint. The viewpoint, once fixed by the tripod, can be examined at leisure. When I finally get the tripod where I want it, I can put my chin on it and see what no one ever has or ever will see in exactly the same way. And in some instances there is the added thrill, the extra special privilege that comes from seeing and photographing forms that have never been and will never be again: wind drifted snow, ice forms, fast water, surf, dunes, clouds, positions of field animals,

expressions of faces, attitudes of bodies, cloud shadows flying over the land, groups of birds, gatherings of people. Something happened for a moment. You photographed it. You were there.

My observation of many workshop students indicates that a lot of photographers don't use tripods when they could and, therefore, should. Why not? Many have tinker toy aluminum tripods that would drive a Zen master around the bend, few know how to set up quickly and efficiently and feel as though they are wrestling endlessly with a giant metallic squid, and some are just too lazy to carry one (beyond help). I called Paul Horowitz, whose head is stuffed with meaningless trivia, and asked why people who should know better keep making aluminum tripods and why people keep buying them and why are they so awful anyway? His answers, in order: They make them because aluminum is cheap and, because it is so soft, it is "as easy as clay to machine." People buy them because other people buy them and they don't have much choice anyway. Lots of things make them awful: Aluminum is so soft that, in industry, it is never used in contact with other aluminum. Aluminum parts grind their surfaces against each other and produce abrasive filings that quickly cause them to bind; they "gall." In the case of tripods, those filings also chew up the soft nylon bushings at the joints. Aluminum is also the only metal that suffers from "aluminum disease" which is the crusty white growth you see sooner or later on all non-anodized aluminum things. To prevent it, we anodize cold light heads even though they are only used indoors. Why don't the tripod makers anodize? Reduces profits. There's more. What do you know about the dread Vanderwall's

forces? Nothing? Good. Vanderwall's forces recognizes the insatiable desire of molecules to cling to like molecules. For example, smoothly machined objects of like metals will stick as tight to each other as if they were glued and aluminum will stick tightest because it is softest. All of the above tendencies of aluminum to bind are increased enormously when you put a tube of it into another tube of it thereby increasing the contact area. The inherent binding tendencies of the material are even further multiplied in the case of tripods by exposure to dust, frost, moisture, salt air, and other standard daily outrages such as being thrown into a car trunk a few dozen times and bounced around for a few hundred miles. One splash of salt water corrodes everything into a solid mass forever. What else? Any metal is nasty to touch in cold weather. If you bend an aluminum tripod leg it will either break or not slip into (or out of) whatever it is in or out of, even if it has not yet contracted its disease, galls, or Vanderwall's force. If you try to straighten a bent leg it will break off. You can't fix it. Come home. Your trip is over. Is there any worse material than aluminum for building tripods Paul? Yes. Pewter. Is there any better material for building tripods Paul? Yes. Wood.

The first workshop has been full for some time and there is a stand-by list but, as of this writing, there are still several spaces available in the August 11 to 18 workshop. If you would like to come, call 802-257-5161.

With best wishes,

A handwritten signature in cursive script, appearing to read "Fred Fisher". The signature is fluid and stylized, with a large loop at the end.

ZONE VI Newsletter

Number 44, September, 1985

"You can observe a lot just
by watching."

Yogi Berra, courtesy of
Ridge Gilmer, Galveston, TX

Meters: Long ago I lost or threw away the bothersome lens cap. It isn't needed to keep the battery alive because modern meters shut off the juice when you release the trigger. Nor is it needed to protect the lens because the lens is in a deep collar. If the lens should get a scratch now and then, no harm will be done. It isn't a camera.

Tape the ASA ring to keep it from turning. A whole day's work would be ruined if the ring rotated from ASA 100 to ASA 800. The tape also makes readings faster because it covers numbers you don't use.

Replace the useless wrist strap with a lanyard. A rawhide boot lace or a strong cord will do. Make a loop to slip your belt through. If you use just enough cord to allow you to get the meter to eye level, it will be short enough to prevent the meter from reaching the ground if you drop it.

If you paint out the numbers you don't

use with a black felt tipped pen, it speeds readings. I painted over all shutter speeds above 1/250 and all lens stops larger than f/4 and smaller than f/64. Finally, I coated the Zone dial with clear nail polish. I've been trying forever to find someone who can make zone dials out of Mylar. So far, no luck. If you know of someone, would you let me know? Until then, if your zone dial is frazzled, send it with a self addressed envelope and we'll send you a new one.

Filters: When you think about it, filter factors can't work. The reason is that if you use a filter that has a factor of 2 (give twice the indicated exposure; one stop more) that factor would only be accurate for all values if it was a neutral density filter! (In which case it would have no effect except to decrease your film speed.) So to have any effect, the filter must have variable factors. A yellow filter might have a factor of 2 for a gray wall in shade, a factor of 1 for a gray wall in sun, a factor of 3 for a clear blue sky in Vermont, 4 in the rockies and almost no factor for the yellow sky over some big cities. A yellow building of high saturation would also have a factor close to zero. Maybe. What would be the factor for green paint in sun and shade, red paint, green leaves? Who knows? The minute you use a filter you lose the ability to visualize the values of a print. You're lost. You're found! I am using

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filters more than I have in the past because now, for the first time, I can visualize exactly the effect that the filter will have on all values. If you aim our modified meter through a filter and make your readings, you can visualize its effects exactly. After you determine placement, put the filter on the camera lens and take the picture. Forget filter factors, the proper exposure is automatic. The reason this works with Paul's meter (and no other) is because the spectral response of our meters has been modified to match that of the film.

If you don't like the value progression the meter indicates with one filter, try another. Recently I had to photograph a brick building. The meter indicated a merger with the sky. I put a K-2 filter on the meter and it showed that both values were lowered equally. Paul Horowitz and I had made hundreds of tests so you would think I'd trust it by now, but I couldn't believe it. The building looked quite red-brown, the sky was, well, not very blue now that I think of it. Just dark. I put the filter on the camera and took the picture anyway. Next, I tried an orange filter with the meter. Same result indicated; still a merger. Impossible. An orange filter on a reddish building and a blue sky had to work. I put the orange filter on and took the picture. Finally, a red 25-A filter placed on the meter indicated a measley one stop difference between the sky and building. I held the 25-A in front of the camera lens and took the picture. The proper proof showed that the first two exposures were useless mergers. The meter had been correct. The 25A filter was the only one that had any effect.

Enlargers: I figured out a precise way to level an enlarger. You need a piece of glass about 3x14 inches and two unsharpened pencils. For the glass, a medicine cabinet shelf works well. First, replace the negative carrier with the glass. It should extend from left to right. Lower the head of the enlarger until a pencil fits snugly between one end of the glass and the easel or counter top. Lock the head at that height. Then feel with the pencil under the other end of the glass and adjust until the pressure on the pencil is even at both ends of the glass. Then turn the glass front to back, feel both ends with the pencil, and adjust. If you can't slide the glass right through, feel close to the head with the pencil and then farther out.

Next, raise the enlarger head and press the glass up against the lens flange with the eraser end of a pencil. Focus down until the pencil feels snug between the lens and the easel or counter top. With another unsharpened pencil, feel out to the right, then to the left. Make the necessary adjustments.

Check the lens stage front to back the same way. Your enlarger will now be perfectly aligned. No standing on chairs, no squinting at bubbles. With this method you not only become aware of how far your enlarger was off, you may learn that the alignment controls are difficult to control.

One of our customers, Bill White, found out that all the controls work beautifully on a 4x5 Beseler. Except one. The one for the side tilt of the lens has, in machinist language, "lots of slop." To unslop it, Bill,

a master machinist, made a spring loaded micrometer device. It is precise and fast, and we now install it on all the enlargers we ship. It is also available separately to present owners of Beseler 4x5 enlargers. It is easy to install; no drilling is necessary. If you would like one, the stock number is L-650, the price is \$95.00.

Tripods: Yesterday a fellow whose name escapes me called and suggested we add a lock washer and an additional flat washer under the knobs that attach the legs to the top of our lightweight tripod. He said the three washers (the lock washer goes between the two flat ones) give increased tension with less pressure on the knobs. We bought three flat washers and three lock washers during lunch hour and tried them. He's right. We bought a bunch more and added them to tripods we shipped that afternoon and we will install them on all lightweight tripods from now on. If you have a lightweight tripod and would like to modify it, get three washers to match the ones already there and three heavy duty lock washers. Or drop us a line and a return envelope and we'll send you a set. No charge. Ask for a "Lightweight Tripod washer kit." If he (the idea man) reads this, get in touch and claim your reward.

We added another tripod modification. If you notice in our new catalog, a cord has been added that connects the legs. There are six steel "footman's loop" fittings and an adjustable slide. It is designed to keep the legs from spreading no farther than you would like. I have never found such a rig necessary, but if you take pictures with the camera close

to the ground, it will keep the legs from sliding out. If you would like one, order a "Tripod Control Kit" and send \$12.00. We will include a set of washers. If you need such a device only occasionally, save \$12.00. Carry four feet of cord and loop it through the legs.

Artful dodger (Lawton): I had to dodge a building in a print that had clear sky above it and smooth lawn below it. I could find no way to dodge it without creating a pale fan-shaped streak made by the dodger wire. Wire is really no good for dodgers. Too thick. What's thinner? Thread. How do you stiffen a thread?. I got a wire clothes hanger, bent it into a circle and tied a black thread across from North to South and another from East to West. A piece of masking tape, torn or cut to any desired shape, is stuck on where the threads cross. What makes it a "Lawton?" The hanger was supplied by the Lawton One Day Dry Cleaning people in Brattleboro and it seems appropriate that they receive whatever applause may accrue.

Chemicals: The new (yellow) Kodak HC-110 film developer that I tried some time ago has worked out well. The first batch I received was weaker than the old (brown) HC-110, but subsequent batches that I tried seem identical to the old developer and I have gone back to my old development time. The look of the prints is the same and all is well. But I had a disaster that could happen to you. I bought a few bottles of HC-110 in a local store and developed the first twenty negatives from an overseas trip. The negatives looked horrible; skies were nearly opaque. I examined the HC-110 bottle. It said HC-110 **replenisher**. The

bottle is the same size and the same square shape as HC-110 **developer**, the liquid is the same yellow color, the labels are the same yellow color; everything is the same except for the word "replenisher." They gave me the wrong bottle in the store and I never thought to read the label. Why doesn't Kodak change the shape of the bottle and the color of the label? How often does disaster strike in a commercial darkroom where both developer and replenisher are used? If you use replenisher, transfer it to a round bottle or wrap it in barbed wire or something.

If you are getting marks from drying screens on your prints, the screens are contaminated with fixer. Swab them with a solution of one cup of Clorox in a bucket of water and rinse thoroughly with clear water. If you are in a nasty water area such as New York City, try what my friend Eva Rubinstein (a very great photographer and the daughter of Artur Rubinstein, the greatest, I think, Chopin and Schubert, especially, pianist) suggests for washer cleaning. Editors; please leave that sentence alone. It is quite possibly the worst sentence ever written in the English language and should, therefore, be allowed to stand until someone establishes an inferior benchmark. (I HATE that sentence-E.O.) Eva uses Polident denture cleaner. She suggests you put some in a print washer full of water, soak overnight, and rinse thoroughly.

Next; a convenient way to manage print developer. (This Newsletter issue could fill the "Tech Tips" column of a camera magazine for the next three years.) I mix up two one

gallon packages in a bucket containing two gallons of 107° water. Then I funnel it into one quart whiskey bottles. I get them from my neighbor. If you fill the bottles right to the top, there will be no air and the developer will last for months. To make up a working solution, pour a full bottle of Dektol into two quarts of water, a bottle of Zone VI into three quarts. People are always asking whether Zone VI print developer is better than Dektol. Yes. (Why would we bother to make a developer that's worse? Why ask when you can try it?) Try it. If it isn't better, get a refund.

Films: There are a few options for 4x5 camera users that are convenient when you are away from decent film loading facilities or have to travel light. Last year, on a trip to Greece and Scotland, because I had to carry my gear between ferries, etc., I decided to take a dozen Tri-X film packs rather than the usual forty film holders. A film pack is about the size of one holder. You get sixteen exposures per pack and a pack costs about \$16.00; almost three times the cost of 4x5 sheet film. Film pack is hard to find so order it at least two months before you need it. You will also need a film pack adapter or two. They cost about fifty dollars but many stores have used ones around.

Pack film is rather thin and flimsy compared to the playing card stiffness of sheet film. It has to be flexible because, using a paper tab, you pull each sheet around from the back of the pack to the front. It seems to be the same material as 120. Film pack is convenient. It takes only a moment to remove an exposed pack from the adapter and

drop in a new one. I carry two adapters, one marked "Normal," the other, "Plus 1." When I remove an exposed pack from the "Plus 1" adapter, I write "Plus 1" on it. I've given up on minuses. I'm satisfied that subjects that are so harsh that they need minus negative treatment are better photographed under softer lighting conditions or were never worth photographing in the first place. Film pack is fast. You just pull the tab to position a new sheet. The tabs are numbered so you can see how many sheets are left in a pack. When using film pack, beware of double exposing negatives; get in the habit of pulling the tab to insert a fresh film immediately after making an exposure. If, when you are about to make an exposure, you have the slightest doubt about whether you pulled the tab after the last one, pull another tab to be sure.

Most of its faults are small. It costs more, but compared to airline tickets, what's another \$100.00 for film? It is more difficult to tray develop than sheet film because it is flimsier, but after fifteen minutes of practice with the lights on, then fifteen with the lights off, using a few unexposed sheets (you can take a few out of the pack without spoiling the pack) you will soon be able to develop a whole pack with ease. Because it is thin, it has a tendency to sag in the negative carrier. You can use either a glass carrier or a regular one. I tried both kinds and ended up using a regular carrier. To pull the negative flat I used strips of masking tape at the corners. This film has big margins at the ends so there is a lot of room for the tape. I also tried a Beseler "Negafat" carrier which, they said, is made for the purpose. Expensive and

useless. It has little claws that reach well into the image area and scratch off the emulsion. The claws are spaced about a half inch apart and hump the film into a decidedly unflat washboard configuration. Perhaps if Beseler replaced the claws with a continuous rubber strip, that would solve the problem.

There is one big problem. The film does not lie flat in the holder the way sheet film does. The worst area seems to be along the right hand edge of the image, assuming a horizontal picture. About a half inch of negative seems to be badly affected. Is the film curled from lying bent in the pack or does it get bent when you pull it? I doubt the latter; when you pull it you bend the whole film. I opened a pack to have a look and sure enough, there is a little curl there. To ease the problem, make sure that you don't have any straight horizontal lines (buildings, etc.) at the right edge because the lines may get wavy. Stop down plenty to help with the focusing. To completely solve the problem, you have to waste a little negative. Arrange your compositions so that they will work without the 1/2 inch that you see on the right side of the ground glass. I cover the right hand edge of the ground glass with masking tape.

We checked out a new roll film holder for a 4x5 camera. The others I had tried were a Calumet holder that produced a lot of problems, the worst of which was frequent overlapping exposures. A Linhoff back worked well but cost as much as a used VW and was a nuisance. It required you to remove the camera back every time you wanted to make an exposure. Our new holder, although it looks

too fat, slides right in like a film holder. It comes with a ground glass mask that indicates the smaller 2-1/4 area. The negative size is 6x9cm which is about 2-1/4x2-3/4. The shape is "ideal format" and enlarges to 8x10 without paper waste. You get ten exposures per roll. Naturally, you lose some print quality with 6x9 compared to 4x5, but you will get better quality than you would with a hand camera because, assuming a 2-1/4 square hand camera, the film area will be greater. Also, good view camera lenses are better than the best hand camera lenses and, in this case, you are using only the best part; the very center of a lens that may have the ability to cover an 8x10 film. Also, with view camera controls, you can often focus sharply on the whole scene with the lens wide open. That's a big advantage because it enables you to achieve the desired depth of field at the most advantageous aperture while using a higher shutter speed.

During the last workshop an experienced chemist pointed out that because there is hypo in selenium toner, to tone in a solution that contains both selenium and hypo clearing agent doesn't make sense. He suggested you tone first and then bathe the prints in hypo clearing solution. But you will need to establish an alkaline toner bath to prevent stains. The use of about a spoonful of Kodalk balanced alkali (Kodak supplies it and calls it KODALK) to three gallons of working toner solution does the trick. Since the writing of "The Zone VI Workshop," I have been told by people I respect that "Permawash" is considered not only inferior to hypo clearing agent in its archival properties, but, when

combined with selenium, is dangerous to breathe. Use Kodak or Zone VI Hypo Clearing Agent. Selenium alone is not so good for you. I save up a lot of prints so that I only tone every month or two. I open the darkroom door, turn on a big fan in addition to the exhaust fan and stand back from the tray. Would some sort of mask, etc. be useful? If you know, please write. To summarize the new toning procedure: first tray; water soak if prints are dry, second tray; pure hypo for three to five minutes with occasional agitation, third tray; about five ounces of Kodak Rapid Selenium Toner and half a teaspoon of Kodalk balanced alkali per gallon of water. Agitate constantly in the toner until prints pick up the desired color; about three to ten minutes. The last tray is Kodak or Zone VI hypo clearing agent. Agitate now and then for five minutes, then wash as usual. I toned two identical prints both ways and, though there was no difference in appearance, the new way gave me a slightly quicker wash. The silver nitrate test showed one print was clean in thirty minutes, the other took forty five.

You can't please all the people...This Newsletter constitutes an attempt to clean out my "Newsletter Notes" file and, I hope, fulfill for a while the many requests for "more nuts and bolts."

With best wishes,

A handwritten signature in cursive script that reads "Fred Picker". The signature is written in dark ink and is positioned above the printed name.

Fred Picker

ZONE VI Newsletter

Number 45, December, 1985

What makes a photograph powerful is the sense it gives the viewer that the photographer cared passionately and intensely about his subject, about the way that he and his camera saw it, and about every detail of the final image. The viewer must sense that it was absolutely essential for the photographer to make that photograph in order to express some fundamental need. The basic, if self evident, difference between an artist and other people is simply that an artist has a more highly developed sense of the importance and urgency of making art.

Richard Whelan, Double Take

Squall light. A black-bright presence that arrives in a rush to announce heavy rain or high wind or a cold front coming through. Squall light, though rare, seems more frequent on summer evenings but it can appear, where I live, at any time of the year. Its effect is startling. Dark objects seem bright, somehow concentrated, as though charged with energy. Pale objects radiate light. The effect is un-

earthly, unsettling, exciting, surreal.

The wonderful strange light arrived in a rush while I was driving south through the Granville Notch on Vermont's beautiful Route 100. I immediately started a frantic search for something--anything--that would serve as subject matter. (The drama of the light alone would almost make the picture.) In a minute the light was gone. It never lasts much longer but I knew from experience that it pays to set up anyway. (Because it happened, it could happen again.) If you set up, you might get nothing; if you don't, you will surely get nothing. Maybe I can find a subject quickly and maybe there will be a usable camera position and maybe the light will come back. When opportunity and preparation meet, luck can happen. It's getting late. Because I am going south and it is evening, I am looking only toward my left. (Everything to the west is back lit; no use looking there.)

Suddenly, a smooth pale granite cliff and in front of it the most photogenic of trees; a magnificent young beech. Beech trunks glow like mercury, even in ordinary light. The tiny leaves are butterflies. Tumbled rock creates a base rich with detail, a jarring counterpoint to the smoothness of the cliff. The shadowed cracks between the bright rocks will print like jet. The silvery glow of the beech will be further accentuated

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if the squall light returns. There is a place to park and in no time the 8x10 is up, focused, the shutter cocked and a holder in place. With the 480mm (19") lens the depth of field is short. I guess 1/5 at f/64 and set it.

There is no change in the light so I have time to take a few meter readings. I want liquid silver. That means placing the high values on VI and developing normal-plus. (If the light should return, the high values placed on VI will go up to VII and the normal-plus development will bring them to VIII.) That's a perfect negative; fully exposed and fully developed, but nothing blocked. A negative like that gives the photographer all the options. He can print the high values pale as is and still get blacks if he wants or print all or parts of it down as deep as he likes. Because the high values are at the top of the curve, the lower values will be up on the straight line as far as possible and as well separated as they can be. I hate milquetoast negatives. The meter agrees with the setting. All dressed up and no place to go... Nothing to do but wait out the fading day. The subject in ordinary light doesn't justify the \$2.00 cost of a sheet of 8x10. Wait.

WHOOSH! A Greyhound bus pulls up in back of my car and a herd of people debus and flood across the road at me. It is early in October...the time of the leaf peepers. They come from everywhere, in every size and type of vehicle. There are Greyhounds like quonset huts, Winnebagoes like moving vans, Jet Stream trailers like silver worms, Mercedes, pickup trucks, Pan Ams, Grand Ams and Mini Ams. They carry license plates from Florida to Alaska

and display bumper stickers proclaiming their love for a person, place, or thing and they throw their trash all over the roadside. The year round population of Vermont is about half a million; in "foliage," two million.

The sign on this bus reads "New Jersey Camera Club" or something like that. To a person, they are necklaced with cameras and, in a moment, I'm surrounded. And they've got a guide-coach-phototeacher-expert along to show them the ropes. Names of cameras are written on his clothing and on his designer camera straps and he's lecturing as he goes, "don't laugh at the old fashioned camera; some good pictures used to (indignation mine) be made with cameras like that." I'm reminded of a trip I made to Maine twenty years ago with Paul Caponigro. I was trying hard to sort something out of a series of tide pools and there was a large and unattractive dog attending. He was growling fiercely and darting menacingly here and there while carefully maintaining a position just out of rock range. I remember asking Paul how he could concentrate under the pressure of that racket, that movement and that threat. He said you have to concentrate so hard that you shut out everything else except what you are photographing. Grit your teeth and shut it out. It can be done.

Several camera clubbers were right in front of the camera, staring at the lens. What is the fascination that lenses hold for the amateur? I get about five calls a week asking whether I think Schneiders are better than Nikkor or Rodenstock. I always feel like saying, "No, but I have an indigent uncle who

is a Schneider salesman." I have never had a gallery opening during which at least one person didn't ask me that most dreaded of questions, "What lens?" As though a good lens could make a good picture. I'd be delighted to accept a 50% reduction in lens quality for a 5% increase in visual acuity. Weston did OK with a \$5.00 lens.

"Please get the %#\$@*& out of the @\$#&* way," I explained. And then the light was back in a wave and my thumb on the cable release, all by itself, it seemed, delivered a 1/5 of a second slice of it to the waiting film. I pushed in the slide, pulled the big holder out, turned it to the other side, pulled the second slide and cocked the shutter. Though I knew I had caught something rare and very beautiful, perhaps it would come again. Maybe better, stronger. Being set up in the right place at the right time with the right gear and getting one chance was something. Getting two chances would constitute undisputed proof of a religious upbringing and a wholesome life devoted to good works. In hopeful anticipation of even stronger light I set 1/10 second and suddenly it flooded back in an incredible blaze as I fired number two.

During this fantastic light show the herd stood quietly while the photo-coach explained to them what he thought I was doing. Fifty armed "photographers" and an expert were watching me while the most wonderful thing a photographer (or, for that matter, a non-photographer with about a half ounce of visual sensitivity) could hope to see was happening right before their eyes. One fellow had timidly taken a picture of, as near as I

could figure, the back of my head. No one else made an exposure.

The day was over. I followed my lights down the White River Valley but I couldn't get the scenario out of my mind. Why didn't they see the picture, even when a very noticeable camera was pointing straight at it? How could they miss the light? It's not unusual. I've seen many photographers walk past unique and exciting subject matter and stop only when they reach something ordinary. Last summer I took a group to a wonderful area of rock and river. There were a lot of people sunning, swimming, and generally having a good time. There was a lady drinking sixpacks. She weighed about three hundred pounds, was pink and jolly, and she bulged alarmingly from a woefully inadequate bikini. She was attended by a wizened little fellow who looked like a retired Irish steeplechase jockey and a Doberman as slick and black as a snake. You could see that the jockey was wild about her and she was wild about the dog. Meeting people who are proud of their child or pet or vintage car is as easy as walking over and saying, "What a beautiful child, animal, car, etc." They'll jump right in your lap, especially if you have a camera. This group of three was the most fascinating (and accessible) subject imaginable. What was everyone photographing? Mud cracks. Why? Because they recognize as usable subject matter only that which they've seen in other people's pictures. That's how cliches are born. Staff member Clare Brett and I literally drove our protesting charges to photograph this group. Once they got started they had a wonderful time and, I'm sure, got some fascinating pictures.

We've had more than 1500 guests since we started our summer workshops and they generally divide into three more or less distinct but numerically unequal groups. Many are convinced that all they need is a little help with their technique. Zoning. Developing. Printing. Toning. Mounting. Whelan says, "The way a photographer resolves ...technical decisions will reveal some facet of his artistic personality and intentions-but technical proficiency alone can never make a great photograph. Mastery of technique is essential insofar as it allows the photographer to express himself as fully as possible. He must, however, have something to say photographically."

John Irving, the best selling author of The World According to Garp, The Hotel New Hampshire, etc. teaches at writing workshops now and then. He told me that beginners who have nothing to say and much trouble saying it, take whole courses in negotiating with a publisher!

Photographers who are primarily concerned with fussing with technique or swapping equipment are like writers who think all they need to do is improve their typing or get a word processor. A print full of zones, empty of emotional content is as dull as a perfectly typed, but meaningless manuscript. Norman Mailer once remarked that at the age of forty he became tired of punching people who told him they could easily write a book and decided instead to patiently point out to them that learning to write was at least as difficult as learning to play the piano. So is photography. Good photography appears so effortless

(study Atget) that the fantasy that anyone can do it proliferates. It is a truism that the more skillful the photographer, the more invisible the art of creation. If the photographer has done a competent job, his insights become so lucid, universal and accessible that they seem to belong to the observer of his work. What follows, then, is the assumption that the viewer could have produced the work. This, in spite of all evidence to the contrary, is why the myth endures that the photographer merely pulls out a picture as a dentist extracts a tooth. It reminds me of the story of Michelangelo telling a man who admired one of his angel carvings that his job was not difficult, because the angel had always been inside the stone. Michelangelo had simply set it free.

Photographers who excel are no different (and no more numerous) than other champions. Although common sense precludes the thought that without rigorous preparation any one could leap into the role of ballet dancer, Olympic skier, lawyer or cellist, almost everyone is sure he can design and decorate a house, write a book, create a restaurant, and make a photograph. The photographer-without-portfolio's delusion is, "I am just as good, I have just as much to say, more to say, but I am just missing a few technical details." He feels that his experience is unique, as indeed it may be, but what he fails to realize is that it is not necessarily universal or relevant and, even if it is, he may not possess the drive, the sensitivity, or the skill to present it. Why do people photograph? Some do it only because the process interests them. (To them, the medium

is the message.) They are fascinated by the magic that happens when light sensitive emulsions are exposed and they'd rather see a print appear in the developer than make a picture. They play with the toys. They can't seem to talk about photography without mentioning their cameras. That's OK. They are hobbyists without pretensions and they do no harm. Their hobby refreshes them and they make photographs which, at worst, will serve someday as nostalgic records.

And they are easy to teach--up to, and often beyond, the goals they have set for themselves. They are like the amateur musicians in the community orchestra, enjoying the camaraderie, the cooperation, the performing, but never (well, hardly ever) thinking, "next year, the Philharmonic."

Next, there's a group that's tough to teach. They are not a lot different from the first group in expertise but much different in their evaluations of their skills. They rate themselves "advanced." They are stubbornly dedicated to what doesn't work just because they have been doing it so long. Although they have not yet made a picture that is exciting or unique they are sure they COULD. (Couldn't we--couldn't anyone--have composed the opening bars of Beethoven's Fifth? It's only two notes. All we needed was a piano.) And all they needed was the time, the equipment, and the place. That somehow they have not yet assembled the components seems to them merely coincidental.

Another writer whose work I admire immensely, E.L. Doctorow (The Book of David,

Ragtime, etc.) Wrote a few weeks ago in The New York Times, "...the most important lesson I've learned is that planning to write is not writing. Outlining a book is not writing. Researching a book is not writing. Talking to people about what you are doing, none of that is writing. Writing is writing." But very few people have the discipline or the dedication, let alone the talent, of Irving or Doctorow (or their equals) or Atget or Strand, for that matter. Most people don't even read Irving or Doctorow (or their equals) or study the work of Atget or Strand or listen to Mozart and Bach and until they do, their chances of distinguishing between art and trash are limited.

Sometimes it takes a while. I remember a fellow looking at a staff show--and you can believe that our staff can outphoto any group of eight anywhere, anytime--on the opening night of a workshop. He asked me, "What's so good about these pictures?" By the end of the week he apparently had found the answer. He had purchased four of the very prints he had failed to appreciate earlier. It's exciting when students surrender their pretensions and begin to see--exciting for them, and for us.

The last group is the most stimulating and challenging. They are familiar with painting, sculpture, literature, dance, and music. Some have never developed a roll of film, but all have carefully studied the works of master photographers and they are sensitive and careful lookers. They understand that the mechanics and processes of photography must be learned so well that they will become automatic. They want to get through this phase

quickly so that they can get to the important work. Even the beginners in this group have work, though crude, that is often more original and arresting than those with long experience. They (and I) understand that they can not leave their careers and devote their lives to photography. Nevertheless, they have the desire, dedication, and sensitivity to make beautiful photographs and the determination to do so. They are movers, explorers, and adventurers who can accept direction. They are not afraid to work and they are not afraid to fail.

Photographic knowledge and skill grow only from failure. Not a few failures; thousands. Not identical repeated failures, intelligent recorded failures that will not be permitted to reoccur. Good photographers have failed more than poor photographers because they have worked more. (That's why they're good.) They are discriminating, bored with old work and never satisfied. They expect and are used to a high percentage of failure; their drive for perfection makes most of their work unacceptable to them. They regularly trash negatives that most photographers would cherish. Their favorite picture is the one they are going to make next week.

Perhaps the strange notion that photography is somehow easier than music, writing, painting, sculpture exists because it is done with a machine. But a piano is a machine and so is a typewriter. Is it because everyone can make a photograph though few can stumble through the Bach cello suites? Sure, you say as you look at a great Adams landscape such as "Clearing Winter Storm" (my favorite), "if I had been there with his camera I'd have gotten

that picture." But you weren't there. No one but Ansel was ever there. (Have you noticed how much more often good photographers get lucky than poor photographers?) Ansel had the lust for it. He wanted it enough to go out in 100 storms and set up an 8x10 100 times and stand in the wind for hours and come home empty 99 times. The picture? It looks to the uninitiated as though it was made in a 1/10 of a second as, in a sense, it was.

Why, though thousands have tried, has no one approached the power of the photographs that Edward Weston made on a beach half the size of a tennis court? It isn't because we don't know where the beach is or don't have a better camera and it isn't because he didn't show us how. His pictures are published and available to all. It's because he had the talent certainly, but more important, he had the passion. That's what made his pictures great and, if you're alive, you can feel the strength of his desire bursting out of the prints. Desire for what?

The truth. What drives man to create is the compulsion to, just once in his life, comprehend and record the pure, unadorned, unvarnished truth. Not some of it; all of it.

Best wishes for a Happy New Year,

A handwritten signature in cursive script that reads "Fred Picker". The signature is written in dark ink and is positioned to the right of the typed name.

ZONE VI Newsletter

Number 46, April, 1986

"Let us first try to establish order
in the house. Beauty will follow."

Art critic Emile Heuveaux
writing of De Koenig's work in
La Cite'

Though the photographic principles it contains haven't changed, there is no doubt that readers of The Zone VI Workshop would benefit from a revision. Experience accumulated during thirty ensuing workshops has shown that the tests can be further simplified, many of the materials described are no longer available, and my spelling has improved. A revision would include many small changes and one big one. The big one is a simpler, faster way of making a higher percentage of excellent negatives by using the Zone System in a completely different way.

But I don't want to spend time I could spend photographing writing a book so I'll devote some space in this and forthcoming Newsletters to an informal update. Since The Zone VI Workshop was written most serious photographers have become familiar with the general principles and procedures described in it. Rather than starting from scratch, therefore, we can concentrate on refinements.

THE FILM SPEED TEST: The information desired is the same as it always was; find the ASA (or ISO) setting for your meter that provides exposure information that will produce a .08 to .12 density over film base plus fog (minimum printable density) for a Zone I exposure. But I'd change the test procedure in hopes that fewer people would make the mechanical mistakes that result in misleading information. An Asian student at one of our workshops told me that in Japan it is generally agreed that 90% of the people can't follow the simplest directions, 9% can, and 1% can create something original. So we are not looking for perfection; just a higher percentage of people who can make a useful series of Zone I negatives on the first try.

To improve the odds I would stress more emphatically; use one meter, one camera, one lens, one film, one developer. Don't use an automatic camera in auto mode. Don't use shutter speeds over 1/250 with hand cameras or over 1/125 on view cameras; with old lenses on view cameras, keep the speed at 1/60 or 1/30. Because Zone I in nature is very dark and in the print it is near black, photograph a black card. (Tests should always duplicate field conditions as closely as possible.)

I'd ask people to send me for evaluation only those negatives described and exposed

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exactly as directed. (I've gotten whole rolls of haphazardly exposed pictures of a cocker spaniel or a new baby together with a note asking "what is my ASA?") I'd beg them not to write me four page letters instructing me in their advanced testing procedure and requesting useless information regarding the density of each negative. Test negatives have no value beyond the information they provide and scratches don't affect their usefulness so I'd implore readers to refrain from wrapping and insulating and taping and fastening them between boards as though they had value approximating that of a Rembrandt drawing. It takes more time and effort to get at them than it does to test them. Sometimes I get a time-capsule-quality sealed package with each negative in its own separate sealed plastic envelope and a four page letter of instruction. "Please refrain from enclosing instructions. I've tested about 18,000 sets to date and have a fair idea of what's involved; merely drop the negatives naked in an envelope," I'd say.

Meter all four corners of the card to make sure the light is even. If your negatives are thin on one side and dense on the other, it may be possible to find a Zone I density somewhere on all of them!

Because there are no focus markings many people couldn't figure out how to focus a view camera on infinity. A five inch lens with a five inch bellows extension is focused on infinity. To get a more accurate focus and save the trouble of measuring, focus on a distant object, lock the focus knob, then aim the camera at the target and expose.

Here is the new test procedure: (1) set your meter at 1/4 the manufacturer's rating for the first exposure, aim the meter along the lens axis at the black card, place the number the meter registers opposite Zone I on the Zone dial if you have one on your meter or close down four stops from the meter reading (which is Zone V) if you don't. Remember to transfer the aperture and shutter speed indicated by the meter to the camera.

Focus on infinity and make your first exposure. You have made a Zone I exposure with a meter set at ASA (or Exposure Index) of 100 for a 400 speed film. If that negative were to achieve a .10 density over film base, the ASA setting for your meter would be 100 for that film.

Without making any more meter readings (2) close down* (see page 5) a half stop and make your second exposure. (3) close down another half stop and make your third exposure. (4) close down another half stop and make your fourth exposure. (5) close down another half stop and make your fifth exposure. (6) close down another half stop and make your sixth exposure. (7) Make a final exposure another half stop down. If possible, maintain the same shutter speed throughout, using the aperture to change exposure. A dry run before exposing film will show whether you can do that without running out of f/stops. If you can't, you may be able to reduce the light by moving the card farther from the light source (to the back of the garage). Unmodified meter users must use daylight but, if you are using a modified meter, you can use flood, lamp light, or fluorescent of any

color. With lights you can easily adjust the intensity by moving the lights or the target or both. This is the most precise way to perform the test but should not be used unless you are using a modified meter.

Don't keep notes. That speeds up the process and saves an interim step that often results in a recording error. To find the ASA for roll films and 35mm you merely count off from the densest negative down to the negative that has Zone I density. The progression for a 400 speed film is: the first (densest) negative is ASA 100, the second is 150, third is 200, fourth is 300, fifth is 400, sixth is 600, seventh is 800. The 800 is the thinnest and shows little or no visible density above film base. Sheet film users don't have to mark or code their films in any way. The half stop differences in density are clearly visible to the naked eye. Just lay the films out in the order of decreasing density and count them off as above. We have used this procedure for several years at workshops and it works well.

*Though I explained the way the lens aperture works in what I thought was overkill detail in the book, the film tests that come in indicate that a third of the testers don't know that the larger aperture numbers, such as f/22, indicate smaller lens openings (closing down) than the smaller numbers, such as f/4. An easy way to remember is to think of lens openings as fractions of something and 1/22 is smaller than 1/4. This time I would advise those still in doubt to look at the lens as they close down the aperture to make sure the hole is getting smaller!

Each half stop closing of the lens increases the ASA or ISO speed from the 100 ASA of the first exposure. I might further illustrate that with an example of a proper test sequence:

<u>IF</u>	1/125 at f/5.6	=	Zone I at 100 (dense)
<u>THEN</u>	" f/5.6/8	=	" 150
	" f/8	=	" 200
	" f/8/11	=	" 300
	" f/11	=	" 400
	" f/11/16	=	" 600
	" f/16	=	" 800 (thin)

In addition to, "Zone I is minimum printable density" which I used to think was sufficient, I'd say "Zone I, though thin, clearly shows density in the negative." That might prevent the frequent "tests" received consisting of blank negatives. Zone I is not minimum density; Zone 0 is. Zone I is minimum PRINTABLE density and you can certainly see it. I would also mention that opaque negatives (maximum unprintable density?) provide indisputable proof that the photographer opened the aperture instead of closing it.

Test with one lens. If you are using a 35mm camera, the shutter is in the camera so all lenses set at the same aperture will produce almost identical densities. "Almost," because apertures may vary slightly but differences in density will be so small they can be ignored. Leaf shutters in view camera lenses, Hasselblad lenses, etc. may have very different speeds from those marked, however. Modern lenses in Copal shutters are surprisingly accurate up to about 1/250 of a

second but my ancient 14" Commercial Ektar lens in a dinner-plate-sized #5 Acme shutter is not. When set for its maximum speed of 1/50 of a second, it fires at 1/20. In cold weather, it gets a mite cranky and groans out a reluctant 1/8.

I know exactly what its speed is because when we designed our meter modifications, we needed precise shutter speed information for testing the meters. Because the commercial meter checking machines we tried proved to be not only inaccurate but inconsistent in their inaccuracy, Paul Horowitz whipped up the simplest and most accurate shutter speed tester imaginable. He clamped a lens to a post and aimed a thin beam of light at it, then turned off the room lights. Trip the shutter and the light zips through the aperture and strikes a photo cell which activates a timer. When the shutter closes, it cuts off the light which stops the timer. Because one percent accuracy will do, you drop off the last seven digits that the timer (a Harvard U. \$12,000 thing, I suspect) indicates and read off the length of time the shutter was open. I tested all my lenses in about three minutes. That's how I found out that my "1/50" was really 1/201324161.

There's no use trying to fix the poor old thing. It likes 1/20 so I keep it set for 1/50 (unless I need a longer than 1/20 exposure) and adjust the aperture to get proper exposures. In summer I close down one stop; in winter, two. Close enough. Possibly because films were slow in those days or diffraction from small f/stops would be excessively harmful in this lens, the aperture

closes only to f/45 so with reflective subjects in bright light I sometimes have to add a filter to reduce exposure. It's worth the bother. Though three modern 4x5 lenses I know of can match its performance, no modern glass that I've ever used can cover an 8x10 and form images of such elegant, spatial quality.

Even with leaf shutters it is best to test for film speed with only one lens because if you test with several and get conflicting data you will not know whether the lenses disagree or you made an error. To find out what your shutters are doing, make a photograph of something with the tested lens, then an identical picture with the other lenses, using the same aperture and shutter speed. Develop and "proper proof" the resulting negatives together and you will easily see any exposure differences. (Proofs clearly show differences in negative densities that would be invisible when looking at the negatives.) If the proofs reveal a dense negative, indicating that one lens has a slower shutter than the others, you can have it adjusted or just remember to close down, testing to see how much, to allow for its sluggishness.

Test with one meter. If you have a camera with a meter in it, take out the battery. I know it's hard; you paid for a meter, never mind that it's an afterthought they stuffed into a camera as a "feature." No camera meter can approach the performance of a separate meter, let alone a spot meter. For one thing, it's not a very accurate meter. For another, because it's reading "averages"

it has no idea whether it's reading a large area of ice in sun with a small area of black water or a large area of black water with a small area of white ice. Both exposures should be the same but with a camera meter or wide field hand-held meter, they will be different. In the mostly ice picture, the meter will direct you to an underexposed negative because the meter indicates a setting that will render the ice gray. In the predominately black water picture, the meter, in an attempt to make the black water middle gray, will dictate an overexposure. Neither negative will be usable.

The "center weighted" feature is an adman's neat way of turning a sloppy fault (weakening response at the edges of the frame) into a sales incentive. Would you want a "center weighted" spot meter? Of course not. You want a meter that cuts off clean where it is supposed to so that you know exactly what you are reading. Unfortunately, you don't get it. Even spot meters are "center weighted" and, though "one degree" has a nice ring to it, it's more an adman's hype than a fact of life. You needn't be an optical whiz with a lab full of equipment to prove the lie. In a darkened room, aim a one degree meter into the dark and then swing it slowly toward a lighted lamp. The needle or digits will begin to respond before the one degree ring gets to the lamp. Some of the light encroachment is the result of flare but not all. Our modified meters contain three times the factory baffling plus an infrared absorbent coating on all interior surfaces. These improvements reduce flare to the point where it is inconsequential but there is still some effect

from light near the outside of the one degree ring. To provide a safe margin against the possibility of outside influences affecting the reading, I use my "one degree" meter as though it were really a two or three degree meter. In other words, I imagine the ring at least twice the size. Try the lamp test. It will show you how big to regard the degree ring. Don't fight it, utilize the information. The object, don't forget, is not to invent a test your equipment can't pass but to find out what really happens so that you can get the picture.

If you must have two meters, don't test film with both. Test film with your best, most accurate, one. After you have your test results, take a reading of any single tone surface with the tested meter set to its proper ASA and note the indicated exposure for a particular zone. May as well use Zone V and let's assume the indicated exposure for Zone V with the tested meter is 1/125 at f/16. Now read the surface with the other meter and adjust its ASA setting ring until it also reads 1/125 at f/16. That's all you can do. The ASA settings for the two meters may match or they may not. Do not assume that you will remember which meter is the 300 and which is the 200; mark them. Put a sticker on the meter that says "Tri-X ASA 300" or do what I do; tape the ASA ring so it won't revolve accidentally and so you don't have to remember.

Unmodified meters can be made to agree but they will probably agree at only one light intensity, subject color, and UV or IR content. Meter other subjects under different light intensities with the two meters and you

will see variances. Because loss or breakage is possible, I carry two meters; identical modified Pentaxes. Our modified Pentax meters can be paired with each other or with modified Soligors and will give identical readings regardless of light intensity, IR, or UV content, or subject color. Also, if you break one or need it calibrated after a few years, you will not have to re-test for film speed. It will be returned calibrated exactly the same as when you originally received it.

Because our modification makes meters see all colors of light and all subject colors exactly as film does, if you have one it is OK to test under tungsten or fluorescent light and with a target card of any color.

I got an interesting letter from Alan Ross, an outstanding West Coast professional photographer, print maker, and teacher who was an assistant to Ansel Adams for many years. Alan still makes the Ansel Adams "Special Edition" prints. "...the light meter modification is wonderful! How come no one else makes a meter that sees light the way film does? It seems so obvious! I photographed a neutral test card in sunlight through tri-color filters and exposed according to the meter (having read through the filters) and all densities were within 0.1 (less than a half stop) of the no filter shot. My assistant's unmodified meter (which had been in agreement with mine) varied .5!!!!" (more than two stops.)

In the next Newsletter I'll discuss some film developing procedures and contrast controls, which were, for the sake of

simplicity, left out of The Zone VI Workshop.

Future workshops depend on Putney School's summer program plans so we are never sure which will be our final year. There is still space in the August second and August tenth workshop.

Some well qualified doctors and chemists wrote regarding the handling of Selenium toner. They say it is not especially dangerous to breathe; it gives off a little ammonia. It is not a good idea to touch it, however, but solving that problem is simple and cheap; get some disposable rubber gloves at a pharmacy or paint store. The medical non-surgical ones are the ones I bought.

Many kind words arrived following the last Newsletter with requests for more information regarding working methods and field experiences in the making of specific pictures. I'll be happy to respond to those requests. And I just finished filing negatives and proofs from 1985 and compiled some statistics that I found startling and educational and which I'd like to share with you in the next issue. They concern number of days in the field, number of subjects photographed, number of negatives made, hours in the darkroom, number of prints made, etc.

With best wishes for a fine summer,

A handwritten signature in cursive script that reads "Fred Picker".

ZONE VI Newsletter

Number 47, June, 1986

"I was telling him (a visitor) it would take a lot of hard work, from which there is no escape if one wishes to be an artist in any medium. Musicians practice constantly; most photographers do not practice enough. The siren call of the hobby obscures the necessary exactions of art. It is easy to make a photograph, but it is harder to make a masterpiece in photography than in any other art medium."

Ansel Adams, An Autobiography

In the last Newsletter I began a review of improved procedures that would appear in a revision of Zone VI Workshop if I were to revise it. I described a more direct method of arriving at the proper film speed. Although the desired result is the same as before; find the ASA setting for your meter that will provide a negative with a density of .1 over film base plus fog for a Zone 1 exposure, the new procedure should result in fewer mechanical errors. I made a mistake in describing half stop (intermediate) ASA numbers. I wrote 100, 150, 200, 300, 400, 600, and 800. These are close, but not precise and don't fit the meter numbers. Kenneth Hanson of Orange, CT was kind enough to point out that the proper progression is 100, 140, 200, 280, 400, 560, 800. He's

correct. Although full stop numbers are a factor of two as I indicated, half stops are a factor of the square root of two, or 1.4. Paul Horowitz not only backed Hansen 100%, he attempted to embarrass me further by asking me why the f/stop between f/4 and f/8 wasn't f/6, but f/5.6. I didn't know. Not content with that humiliation, he plonkingly advised that anti-glare picture glass in contact printers cures Newton Rings. If you keep your Newsletters, please go back and correct these numbers in #46. Let's go on to:

NEGATIVE DEVELOPMENT TIME: Proper negative development time will produce a negative that, when exposed for Zone VIII at the tested ASA rating, achieves a density that will print a very light shade of gray (print value VIII) when given the same exposure in the enlarger that will produce a usable photographic black through unexposed film base.

Procedure: Set your tested ASA on your meter, "expose" two 120 frames or three 35mm frames with the lens cap on for the unexposed film you will be needing later, then make a Zone I backup negative using a black card in shade. Next, meter a white card in sun along the lens axis, place the reading on Zone VIII, focus on infinity, and make a roll of identical exposures. For sheet film, make a Zone I negative and four Zone VIII negatives.

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Cut the roll into four parts, put three parts in a light-proof place -I use an empty paper box and put it in a drawer- and develop the first group of negatives for the manufacturer's suggested time. (See Zone VI Workshop.) When they are dry, eyeball the new Zone I backup negative to make sure it closely matches the original Zone I test negative. If it doesn't, re-test carefully for Zone I before wasting time on a possibly misleading development time test.

The development time test is a two part procedure. First, you must establish the minimum exposure time that will render the paper black when a sheet or frame of unexposed, but developed and fixed, film is exposed in the enlarger. (Although the Zone VI Workshop asks for minimum exposure for maximum black, "maximum black" was so much more exciting than "minimum exposure" that everyone over printed.) To find your minimum exposure for usable black, focus a real negative for an 8X10 print, set your timer for three seconds, then substitute clear film for the negative, set f/11, and expose an 8x10 sheet of grade 2 paper for three seconds. Next, cover an inch at the right side of the sheet with a card and expose three seconds. Move the card left an inch and repeat. Make ten one inch three second test strip exposures (See Zone VI Workshop.) Develop the paper for two minutes and agitate it vigorously; flop it upside down at least every fifteen seconds and agitate in between. After fixing, identify the stripe that is not clearly different from the darker stripe adjoining. If in any doubt, pick a stripe that might be too light rather than one that

might be too dark. If the stripe appears before the fifth stripe, close the lens down a stop and try again. If the last stripe is the darkest, open the lens a stop and try again. If you are using a variable contrast or weak graded paper or some anemic developer, forget black. Forget print quality. To go to all this trouble to improve print quality and then make it impossible to achieve just to save ten cents on a sheet of paper is...(editor, can you find a kinder word for "dumb" that is just as accurate?) Editor's note: No.

Typical of what's happening, even in formerly excellent graded papers, was the performance of Brovira, "famous for rich blacks," which I recently checked out. It's D-Max is 1.89; (Seagull is 2.05, Brilliant is 2.15.)

This problem is not new. In his autobiography, Ansel Adams wrote, "It is unfortunate that most photographic manufacturers know or care little about creative photography. They have a vast knowledge of advertising and sales, some of engineering, optics, physics, or chemistry, but none of aesthetics. Everything must relate to the marketplace; if sales are not adequate, the corporation will find it difficult to continue, certainly unable to spend funds on exotic indulgences such as fine printing papers." Ansel Adams, p.297, An Autobiography. Ultimately, it's our fault; manufacturer's have no incentive to create fine printing papers unless photographers quit buying junk.

If you see a close match between the new

Zone I negative and the original Zone I test negative, you are ready to proceed to the final step of the development time test: Put a Zone VIII negative in the enlarger, a sheet of grade 2 paper in the easel, and cover half the paper with a card. Don't move the card this time. Don't reset the timer. Give the same number of three second exposures that produced black through the unexposed film. Make sure you use the same enlarger head height, lens aperture, and stabilizer setting (if you have one.) If, after development, the exposed half of the print shows more than a trace of tone, (compare it to the white, unexposed half) the negative is too thin. Develop the second set of negatives (or the second sheet of film) 25% longer and try again. If, however, the exposed half of the print is too light (white,) the negative is too dense. Develop the second set or sheet 25% less and try again to make a print as described above. Try a third time unless your second attempt is satisfactory or is close enough that you can interpolate. Even a perfect test result may not hold up in actual work because of the way you place your values, the way your meter responds, etc. To refine further, keep a close watch on your "proper proofs." If you see that most of your negatives would benefit from more (or less) contrast, adjust your development time in fifteen second steps until you are satisfied.

I don't think it matters what the actual print value VIII is as long as it is fairly close to paper base white and you know what it looks like. Knowing what your Zone VIII placement will look like, you can place your value on a high VIII if you want it "on the

edge" (unless your Zone VIII is already on the edge,) or a low VIII if you want slightly more tone than your test print showed.

In a revised book, for 35mm only, I would suggest doing a development time test using grade 3 paper rather than grade 2. There are several reasons: 1) A shorter development time dramatically reduces grain. 2) The grade 3 paper -assuming quality paper- will print a strong black even through the dense 35mm base; a grade 2 usually won't. 3) Because 35mm is often used in fast breaking uncontrolled situations where "hot" areas can accidentally appear, the short development of the negative will reduce the contrast and give you two grades -grade 2 and grade 1- below "normal" to step down to. The trade-off (there is always a trade-off) is that the low values will be underdeveloped in the negative and you will lose separation. But I think that in the kind of work that 35mm should be used for, the loss of low value crispness is a worthwhile exchange for strong blacks, smoother high values, reduced grain, and easier-to-print negatives made under contrasty conditions. If you try the grade 3 approach for 35mm, check your first "proper proofs" carefully; you might find that you need an extra half stop of exposure to compensate for the decreased development.

In order to present the exposure and development process as simply as possible, I left plus and minus developments out of The Zone VI Workshop. I put plus one and minus one procedures in The Fine Print, however, and the instructions there are adequate. But I no longer use either plus one or minus one

development because you can print a normally developed negative on grade 3 or grade 1 paper and get the same results. The difference between a plus one printed on grade 2 and a normal negative of the same subject printed on grade 3 is so slight that it disappears during the making of the print. Try it. (35mm developed for grade 3 paper as suggested can be printed on grade 4 for a plus one effect or printed on grade 4 and developed in undiluted print developer to get the equivalent of a plus two.)

When I'm positive that I need more than a one paper grade contrast increase, I place the high value no higher than Zone VI and-a-half and develop the negative normal plus one-and-a-half. When I think I need more contrast but I'm not sure exactly how much more, I make two negatives. One is exposed and developed normal, the other is exposed less and developed plus one-and-a-half. The normal negative will print as a plus one on grade 3, as a plus two on grade 4. The plus one-and-a-half will print as a grade $2\frac{1}{2}$ on grade 1, as a grade $3\frac{1}{2}$ on grade 2, $4\frac{1}{2}$ on grade 3, etc. My method provides a more useful "choice of negatives" because one negative doesn't duplicate (with a paper change) the performance of the other. The plus and minus one and-a-half technique gives you the option of printing between paper grades.

If you want to try my way, find your plus one-and-a-half development time by exposing negatives on Zone VI-and-a-half and develop them to Zone VIII density. For a minus one-and-a-half, expose on Zone IX-and-a-half and develop to a Zone VIII density. I can't

remember making my last minus, except for 35mm negatives which are, in effect, all minuses. I think minus situations (backlight) are seldom photogenic and that minus development causes more problems than it solves. Although I have read a lot of curves at Polaroid and have seen the scientific "evidence" that reduced development affects the high values more than it does the low, the curve on a sensitometrist's chart has little bearing on the realities of print values. Reduced development is surprisingly similar to reduced exposure as it affects the print because, though the low values are less depressed than the highs, according to the densitometer, they start out with less separation than the highs and appear extremely depressed in the print. Negatives developed for condenser enlargement are all minuses. To print any tone into the high values a printer using a condenser must overprint to overcome the disproportionate high value blocking caused by the Callier Effect. The overprinting turns the lower values, already weakened by the short development, into soot.

I just finished filing work from 1985 and generated some statistics I found interesting. I photographed 120 days last year of which about twenty were spent on commercial assignments and 100 were spent on personal work. I exposed 456 large format personal negatives (about 300 4x5, 150 8x10) or 4.5 exposures for every day I photographed. Some of the negatives were duplicates made either for backup or with different filters, different exposures, under changing light

conditions, or made for different developing treatment, etc. There were about 300 subjects photographed. All the negatives "came out" technically and are capable of producing fine prints. After proofing, I chose thirty-one negatives to print. That's one negative printed for every fifteen negatives made, one negative printed for every ten subjects photographed, one negative printed for every three days in the field.

Because it took an average of three working days -twenty-four hours- to make a photograph that I thought worth printing and it takes me about two-and-a-half hours to print a new negative, I spent ten times as long making a picture that I thought worth printing than I spent printing it.

When you add to the printing time, holder cleaning, film loading, chemical mixing, negative developing, proofing, washing, toning, mounting, filing, cleaning up the darkroom, etc.; it comes to probably 35 hours or a five day work week per printable negative. The percentage is worse than that. Ten of the thirty-one prints were consumed during the traditional, painful, but necessary, "New Years Day Edit by Wood Stove."

Edward Weston said that if at the top of his form and if given adequate subject matter, (two hefty "ifs") he thought he could make one significant photograph for every day he spent in the field. Ansel said that twelve serious photographs a year was good output. To the hobbyist who fires off two 36 exposure rolls on a Sunday morning and prints half of them between cocktails and bed time on Tuesday

night, this level of production will seem like pretty slim pickings. It all depends on what the individual photographer thinks is worth printing.

Of the numerous aspects of the photographic experience there is only one that I find always wonderful, exciting, and capable of producing instant happiness. The best part of photography isn't talking about it or writing about it or teaching it or developing film or hanging shows or publishing books or making prints. It isn't selling prints or having your work admired. It's the excitement of being out there; the anticipation of the unknowable wonder that may appear over the next hill. It is the knowledge that there is a chance of finding and recording a metaphor of your loves, your dreams, your past, and what you may feel about your future. It is the hope of searching out for yourself and your camera something incredible.

I was driving North toward Wick along the northeast coast of Scotland several years ago. I rounded a turn and there was Camelot. A gleaming white castle seemed to be hovering in mid air; it was rising from behind a small hill and you could not see where it joined the ground. Behind the castle shone a tranquil sea. Story book clouds drifted across a purple-blue sky. In the foreground was a velvet lawn as green as jade and as smooth as carpet. The lawn was speckled with dozens of the chubbiest, whitest sheep you ever saw. It was afternoon and the sun was behind me (where it belongs,) the shadows were long, the light

was rich, and all was as lovely as a photographer could wish. I wanted the castle glowing with light and the foreground somewhat suppressed. The viewing filter showed something wonderfully weird. When the field was in shadow, there was almost a merger of the field, the ocean behind the castle, and the sky. I figured a #12 filter would darken the sky a touch and make it merge more closely with the sea and the lawn and then the castle would really float. As cloud shadows flowed across the field, I made several exposures with a #12 and a few more with a milder K-1. Then, when I was confident that I had everything the existing situation had to offer, I barked at the sheep to move them around a bit. This is chancy; make sure you have good pictures before barking because sheep are so silly you don't know whether they will perk up, rearrange themselves into a more interesting pattern, do nothing, or run away and gather into a woolly lump. Make sure you are alone, too; some shepherds don't like having their sheep barked at. Barking won't move a horse but it will usually cause him to raise his head and point his ears. Don't photograph horses head on or tail on; they will appear in the print as a dark lump with two legs. To move horses, try an explosive "YO" and flap your focusing cloth.

While driving on to Wick I mentally re-photographed the days output, wondering what I could have done better. It's a good exercise but it can give you problems because, if you think of something, you have to go back and do it! I thought of something I should have checked while I was at Camelot; I didn't pay proper attention to a hill behind my

camera position. In landscape work you can never, well hardly ever, get a camera position that is too high. I was pretty high because I was on top of the car and the meadow was twenty or thirty feet below the road. But maybe getting up the hill would be better. So I re-scheduled my ferry reservation to the Orkney Islands and spent the next morning exploring the country around Wick. Then I drove three hours south to Camelot for the evening light and climbed the hill. No good. Looking down from above yesterday's camera position diminished the stature of the castle. That's how it goes sometimes, but you have to know that you didn't pamper yourself.

There are still several places available for this August's workshops. If you would like to join us, call 802-257-5161.

With best wishes,

Fred Picker

ZONE VI Newsletter

Number 48, September, 1986

"Perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do, when it ought to be done, whether you like it or not; it is the first lesson that ought to be learned; and however early a man's training begins, it is probably the last lesson that he learns thoroughly."

Technical Education, 1877
Thomas Henry Huxley

Bruce Barlow attended a workshop in 1984. He was such a standout student (though his photography at that point was no great shakes) that I invited him back for the workshops of 1986 so that he could further his photographic acumen in the roll of darkroom floor swabber, totter and setter-upper of gear and gofer in general. He showed promise in that he didn't break too many things and had the wit to treat me with far more respect than I get from more experienced staff members; (a surly lot at best.) He has arms about six feet long and when a tennis racket is at the end of one of them, it's nice to be on his side. He is a consultant with a high powered financial advisory company and, I assume, often wears a suit, but other than that, he's OK. In desperate need of a photographic fix about

April of this year, he flew in from his home in Illinois and stayed with me for a weekend. We went "cruisin' fer snaps" and had a great time. As I was driving along a road he hadn't seen before, he asked me to stop and go back to have a closer look at a group of sheds. He had recognized them from a photograph I had shown at the workshop two summers ago. The picture hadn't been published, so he could only have seen it once (we change shows daily at the workshop,) it was quite abstract, I made it when there was two feet of new snow and from an angle he couldn't have seen from the car. He not only remembered the picture, he related it to subject matter that was going backwards at fifty miles an hour. Impressive.

So I decided to talk to him. He was pretty good on music and wine and read occasionally and we talked about Jeff Hulton, another outstanding workshop student. Jeff had treated the group to a talk about the way we respond, how our intellect can interfere with our desire for clear expression. He referred to his past experiences as a champion skeet shooter and to several fascinating books; The Inner Game of Tennis, by Tim Gallway and The Art of Motorcycle Maintenance by Robert Pirsig, all of which he had found interesting and helpful.

Jeff was talking about something that I wish I knew more about. I am fascinated by the

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diversity of thoughts and actions that must be accommodated before a creative act can occur. Take photography. On one hand you have to be technically sophisticated enough to focus the camera, read the meter and all that stuff; then, in order to make a picture that is less stiff than a fence post, you have to immediately shift gears and become a child filled with wonder and delight. You have to flow with the mood of the subject, get away from the science and yourself and your preconceptions and your presumptions if the spirit of the thing that attracted you is to live in your photograph. Bruce knew about that. He told me about a book that dealt specifically with the problem that has plagued every artist with the possible exception of those unselfconscious men who made the marvelously wild drawings in the caves at Alta Mira. The name of the book is Drawing on the Right Side of the Brain and I read it and did it and it has been important to me in my work. I asked Bruce to summarize it for a Newsletter and he kindly agreed to do so. I hope his description encourages you to get the book.

Dear Fred,

My two workshop experiences have taught me that there are many of us who want to be touched by art, who want to respond and know the joy it can bring, but aren't sure how to go about it.

One of the biggest problems photographers, other than the greatest artists such as Atget, Weston and Strand, face is our general inability to really see what's around us. To understand what we see and record it convincingly within the context of our experience is extremely difficult. Fred, you speak of the photographer "being in the picture" - expressing some idea or feeling through the treatment of the subject matter and all the

elements at his command. "Having a point of view" is another way of describing it - i.e., from the photograph itself one knows what the artist is trying to say. The act of seeing, in the larger sense, is the hardest thing to learn by those of us who are in the early stages of development.

In the remainder of this letter I want to explore some ideas about how we see, and offer some ideas about how to improve seeing, and apply those ideas to practicing photography. Getting feelings and emotions into the picture - transforming it into something wonderful, expressive, and emotive - I can't address all that well. That part, to me, is still a mystery. I am still struggling with the immediate problems.

A terrific book, Drawing On The Right Side Of The Brain, by Betty Edwards (Los Angeles: J. P. Tarcher, 1979) has been most helpful. Her concepts for learning to draw are directly transferable to photography or any visual art, and her presentation is fascinating. I'm sure that anyone who buys her book, and follows the program she lays out (reading the book won't do it) will derive immediate benefit.

She insists that we need to understand how the brain works to influence what and how we see.

The human brain is divided into two halves, called the right and left hemispheres, connected by a nerve "superhighway" called the corpus callosum, by which the two hemispheres communicate with each other. The hemispheres work independently - each thinks and processes information in radically different ways.

- The left half of the brain controls language, mathematics, and analytical processes. For the rest of this letter, we'll refer to the left side as the technical side of the brain, since we use this side of the brain to do the technical processes of photography, like calculating exposures, timing film development and so forth.
- The right side of the brain processes information in a wholistic, spatial and perceptual manner. Conceptualizing, imagining, daydreaming, sorting out patterns and

relationships - creating - is what happens here. For many years scientists believed that the right side of the brain wasn't good for very much, since the tests they designed to measure its capabilities were designed to measure left-brain, technical characteristics, and the right brain performed miserably in the tests. We'll call the right brain the creative side, because it is the side where the creative seeing occurs that we want to develop to make photographs that produce an emotional response.

In most cases, the two modes of thinking tend to interfere with, rather than complement, each other. In addition, one hemisphere usually dominates the other and governs the overall thinking process. When that hemisphere is the technical one (as it so often is in the Western world), we have great difficulty overcoming our analytical, technical responses so that the creative side can operate freely.

Much of what we know about the different sides of the brain was learned from experiments done with people who, through accidents or as a treatment for mental illness, had their corpus callosums severed. Scientists were able to test the capability of each side of the brain without the interference of the other side. They discovered that the technical side immediately labels objects with a word ("spoon", "ball point pen", "brook"), whereas the creative side often cannot name an object, but can perceive its physical characteristics in great detail. When presented with a broken up jigsaw puzzle to assemble (a difficult spatial/visual problem), the subject's right hand - controlled by the technical side - was so useless that the left hand - controlled by the creative side - would actually knock the right hand out of the way!

Western society values and teaches logic and analysis to the detriment of the more intuitive, nonverbal pattern-and-spatial stuff of the creative side. That is a tragedy, since often the creative side is better at analyzing and solving complex problems than the technical side. There are dozens of stories about scientists who solved problems, and even mathematical equations while dreaming, daydreaming, meditating or just walking along a

beach. They usually weren't even thinking about the problem, the solution just came to them. Our schools don't encourage creative problem-solving.

Photography, painting and music deal with the perception, creation and arrangement of patterns and objects to achieve an emotive response. Art is definitely right-brain, creative-side stuff, and the left-brain, technical-side only gets in the way.

How do we revert to the age of five? How do we learn to dominate the left-brain, technical-side training of at least ten or twelve years of formal education with a deeper level of understanding? And then, how do we integrate creative-side thinking with the technical requirements of photography? The best way I know is to start with the exercises Betty Edwards has in Drawing On The Right Side Of The Brain. The exercises are designed to turn on creative thinking, but more importantly, to turn off technical thinking and eliminate the interference between the two halves. A critical part of making all this work is to develop a way to shift the dominance from the technical side to the creative side, and eliminate the interference at will when photographing and working in the darkroom. Everybody will probably have a different way to accomplish this, but the goal is the same - get the dominant technical side of the brain out of the way so that the creative side can perform its magic.

I really want people go out and get the book. I would like to point out several key elements as an enticement:

- Edwards stresses that the shift to creative-side thinking is accomplished with conscious effort - one thinks about shifting thought processes to the creative side (right side) of the head, and thinks about quieting the technical (left) side. She has some exercises to help learn to do this.
- An exercise she uses early on to get the creative side working and the technical side quiet is to draw pictures of other pictures that have been turned upside-down. The upside-down subject matter is more difficult for the technical side to interpret and label,

and easier for the creative side to interpret into patterns of spaces and forms. I recall an old Newsletter where you talked about how Workshop students who used view cameras usually produced better and more thoughtful images. I have to agree and I think the upside-down image seen on the groundglass is a big reason.

- Other exercises involve drawing objects by drawing the spaces around them, a concept she calls "negative space". Her example is drawing a chair by "looking through it" (Fred's term) at the shapes and spacial relationships formed by the spaces around the substance of the actual chair. She focuses here on consciously doing a shift to creative-side thinking until the spaces around the chair look as real and as substantive as the chair itself. A device she uses to help is a piece of paper with a rectangular hole cut out of the middle to frame the composition and to help define the negative space.
- She teaches shading as shifting to creative-side thinking and examining the subject in terms of the shapes of the shadows and their relative brightness to each other. Simple exercises involve just looking around a room at the shapes of the different tonal values and seeing with the creative side the relationships of the spaces and the brightnesses.

It is a delightful, stimulating book. I guarantee it will improve almost anyone's ability to see if they stick it out and do the exercises. They'll also learn to draw pretty well, so they can amaze their family and friends with talents no one ever thought they possessed, and be the life of every party. They may even decide that drawing is more fun than photography.

Now, the hard part begins. Integrating the technical elements of photography with the creative elements. I think the best way to integrate the two is to make the technical stuff as easy as possible, so that one doesn't have to depend on the technical side of the brain to think about it. I offer the following ideas:

- Practice doing the mechanical, technical-side activities until they are so familiar that they are automatic. Do everything the same way, in the same sequence, and practice it until it can be done without thinking. For example, I always meter the scene, close the shutter, set the aperture and the shutter speed, cock the shutter and fire a test, insert the holder, recock the shutter, pull the slide, fire the exposure and replace the slide in the same sequence. Every time. It's a little like a soldier learning to take apart, clean, and reassemble his gun in the dark. When the bullets are flying (or when the juices of creativity are flowing), one has better things to think about than how to work the tools.
- Use a view camera, or some means of inverting the image. Upside down seeing really works. Try also to visualize the "negative spaces" into as strong shapes as the subject matter itself.
- Slow down. Do whatever is needed to shift to the creative side and then think about the image in terms of the shapes, spaces, negative spaces, and tones.
- Keep the creative side active until it feels that the picture composed is "right". You'll know it. It will be when the creative side decides that all of the spaces and relationships and tones are in balance in some way that constitutes a whole. Here's where the mystery happens, too. Sometimes, when it all comes together just right, there's a response that is deeper than just the creative side of the brain, going to the core of one's soul. Exciting, mystical, wonderful photographs are made when this happens.
- Then, relax. The hard part is over. Shift to the technical side, temporarily. Meter the scene, set the aperture and speed, cock the shutter, pull the slide and push the button. Better yet, call upon your practiced sequence of activities to make the actual exposure and never really leave creative side mode.

In 35mm, it's interesting to note that good

pros are starting to use auto-exposure cameras. I remember Alen MacWeeney discussing how he'd like to get a Nikon with its microprocessor controlled auto exposure. He wouldn't have to think about exposure. He'd let the camera handle the technical side part. It's also interesting to note that many who do fast-action street photography tape the aperture ring on a small aperture ("f8 and be there") and the focus ring on the hyperfocal distance on a wide angle lens (for maximum depth of field), and they don't mess with it. They concentrate on what they're photographing. The pictures may not be technically perfect, but that isn't the objective or the criterion for successful, emotive street pictures. It is extremely difficult, in my experience, to juggle the complexities of wrassling with the 35mm technology while trying to use my creative side to see the picture. I just can't do it. The prescription: simplify, get the technical side out of the way.

We have a marvelous aid for doing just that. Polaroid. I used Polaroid exclusively for the first eight months I had a view camera, and sometimes I seriously consider going back and using it exclusively now. Before I had the view camera, I dusted off and used an old Polaroid EE-100 my parents had in a closet for 15 years. A Polaroid camera really simplifies the technology, allows immediate feedback, and gives you the ability to immediately reshoot a scene until you get what you want.

Working with the negative in the darkroom is similar to working in the field. In the darkroom, use creative-side seeing to look at the image put on paper in the same way it was seen in the field. Then, shift to technical-side thinking to evaluate the mechanical changes needed (how many more seconds of light, change paper grade, etc...?) to deliver the desired effect. In a sense, darkroom work is harder than field work. The shift from creative to technical and back happens much more often - one needs to be mentally nimble to go back and forth. The technical side activities can become somewhat mechanical - even though your darkroom techniques, Fred, are designed to be simple, mechanical and repetitive so that one doesn't really have to think much about them, there's still a lot to juggle. Maybe that's why you can go out and photograph all day, yet three

hours of darkroom work is all you can handle. I think most photographers who are trying to make expressive prints probably have the same experience.

I believe that developing right-brain, creative-side thinking and seeing capabilities will help to open the door to better, more expressive photography for everyone. For some it will be the breakthrough they have been waiting for. Developing right-brain thinking opens the door, and if we're lucky and talented, the creative side of the brain will connect with the heart, and our feelings and experiences and our own uniqueness will appear in the photographs we make.

I hope some of these ideas are helpful.

Regards,

Bruce

There are several trips in the offing. The first is a journey to Israel in March. Leading the group will be a good friend and workshop graduate, Sam Hoenig. He knows the country intimately. Contributing to the tour will be Israel's leading photographic school, Camera Obscura, and they will send with us a number of leading photographers. We will also have the use of their darkrooms in Tel Aviv and Jerusalem. All hotels are five star and we'll be flying on El Al from New York. We'll be traveling on a 55 seat air conditioned bus with plenty of room for gear. Sam has arranged that our film will not be zapped, though Paul Horowitz is in the middle of a study that so far indicates that present zappers do little harm to film. The cost of the trip with air fare and everything except a few meals will be \$1975.00. The dates are March 9, 1987 through March 23rd. I'm going to go on to Egypt while I'm in the neighborhood. Highjacking danger?

Statistics show you have worse odds in a post office or a McDonalds or anywhere else in the U.S. El Al's security is so good that they have never had an incident. I've seen some pictures of great rocks, incredible ruins and marvelous faces. Stunning photographs are absolutely assured. This is the coolest time of the year and has the fewest tourists. There is a detailed itinerary and a brochure available; please write or call.

The other trip is also the result of a workshop student's interest. I've never gotten to Alaska, but have always wanted to go. If you don't feel the same, read Coming Into the Country by John McFee. That will change your mind! L.J. Evans from Sitka has arranged for a workshop which I will conduct in June. Darkroom facilities for printing demonstrations and limited student use are available. She has told me a lot about the country around and all indications point to the probability of terrific landscapes so we will be out there doing it most of the time. I'll probably stay on a bit, while I'm in the neighborhood, and see if the fish stories are fish stories. Let me know if you want more information.

In the last Newsletter I covered some suggested changes to the Zone VI Workshop film developing procedure, but left one out. It has to do with a better way to process sheet film. I find that 11x14 trays are necessary to do the job because when you slide a 5 inch long film from one end of an 8x10 tray to the other your fingers hit against the right edge and the film can't quite clear the ones it's lying under. An 11x14 tray with three quarts of developer is a lot more comfortable and, with a little

practice, your negatives will be pristine. Tray development is far superior to tank development because the agitation is thorough and random instead of a pattern that just dunks the film up and down. If you agitate gently, sky areas of negatives that have been tank developed are impossible to print because of nasty areas of uneven density. If you agitate vigorously you will get flow marks through the holes in the hangers. It's an awful way to develop film altogether and I guess that so many people insist on doing it (though not one great photographer I know uses tanks) because of their familiarity with small film where tanks are always used.

A nice refinement of the tray agitation procedure is to count the films and turn the stack 90 degrees clockwise every time you go through the pile. Washing sheet film in hangers guarantees disaster in time because the edges, which are part of the film most susceptible to anti-archival mischief, can get no flow of clean water in a hanger.

For the next Newsletter, I plan a special surprise; then we'll get back to the update of The Zone VI Workshop and a brand new, faster, and foolproof way to place your tonal values.

With best wishes,

A handwritten signature in cursive script that reads "Fred Picker". The signature is written in dark ink and is positioned below the typed name.

Eventually, all things merge into one, and a river runs through it. The river was cut by the world's great flood and runs over rocks from the basement of time. On some of the rocks are timeless raindrops. Under the rocks are the words, and some of the words are theirs.

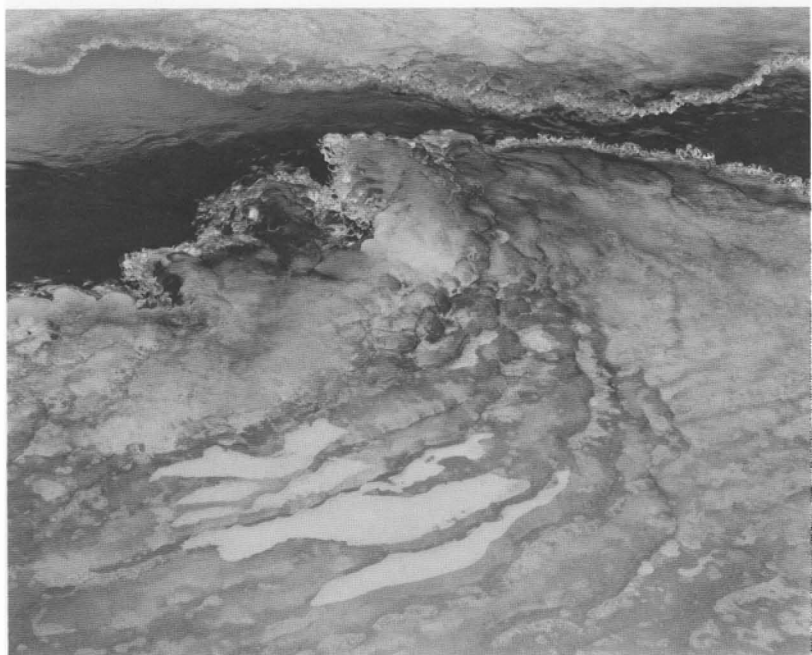
I am haunted by waters.

NORMAN MACLEAN

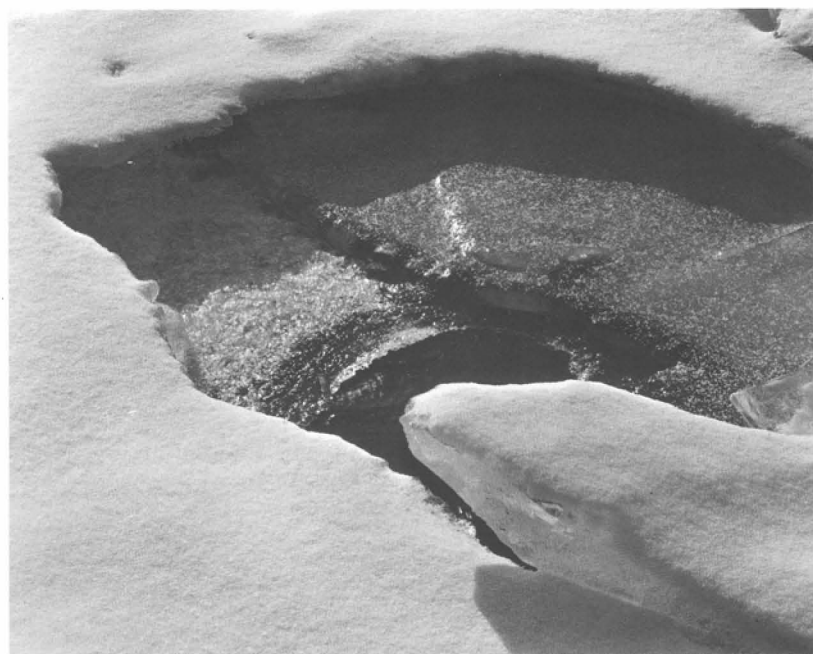
A River Runs Through It

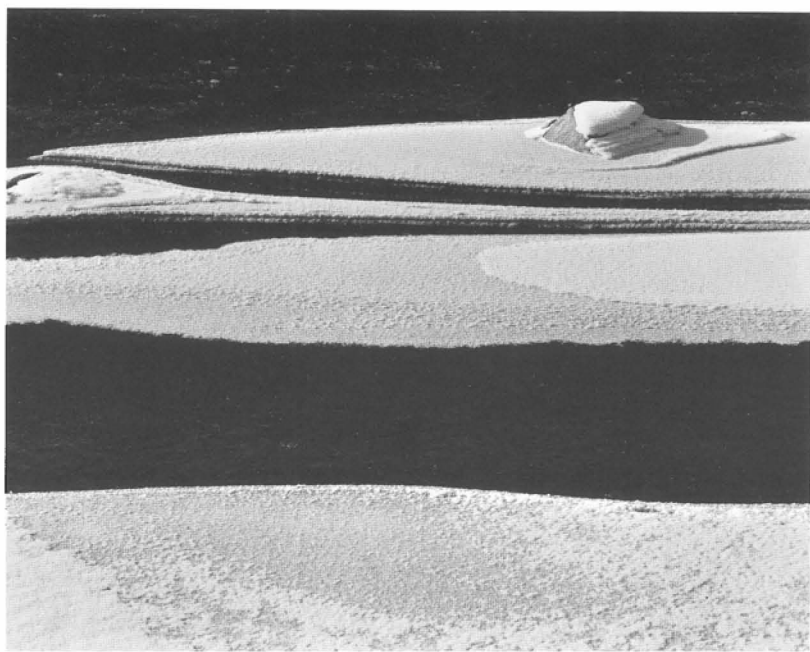


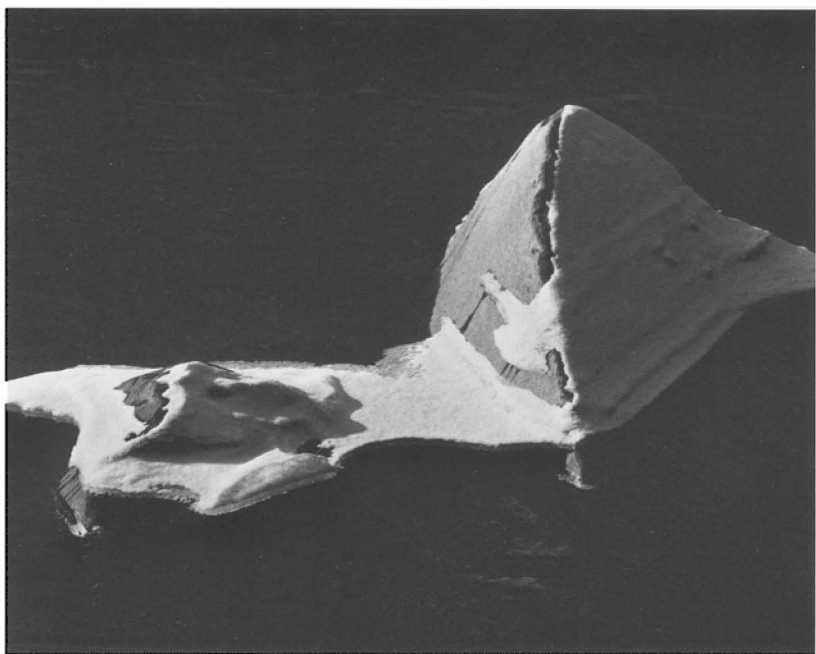


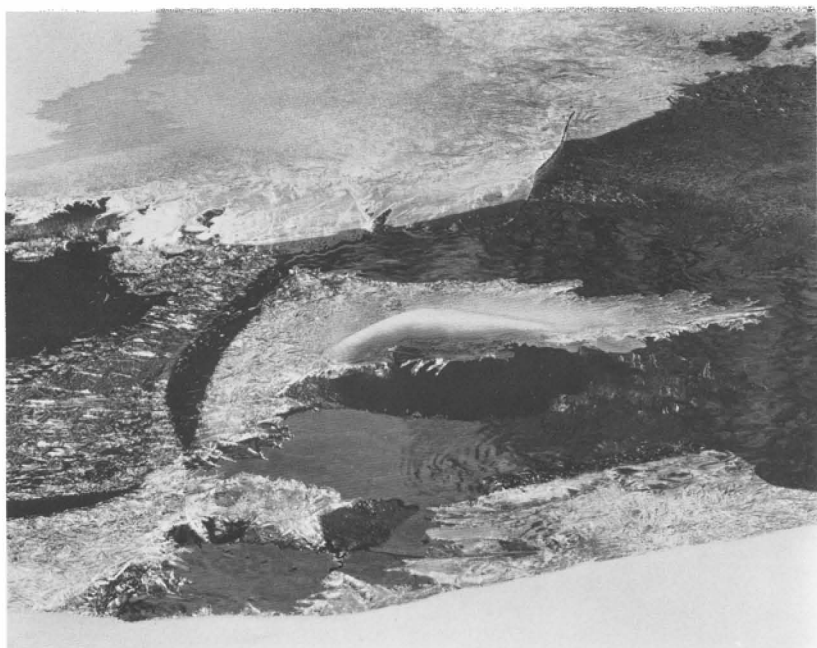


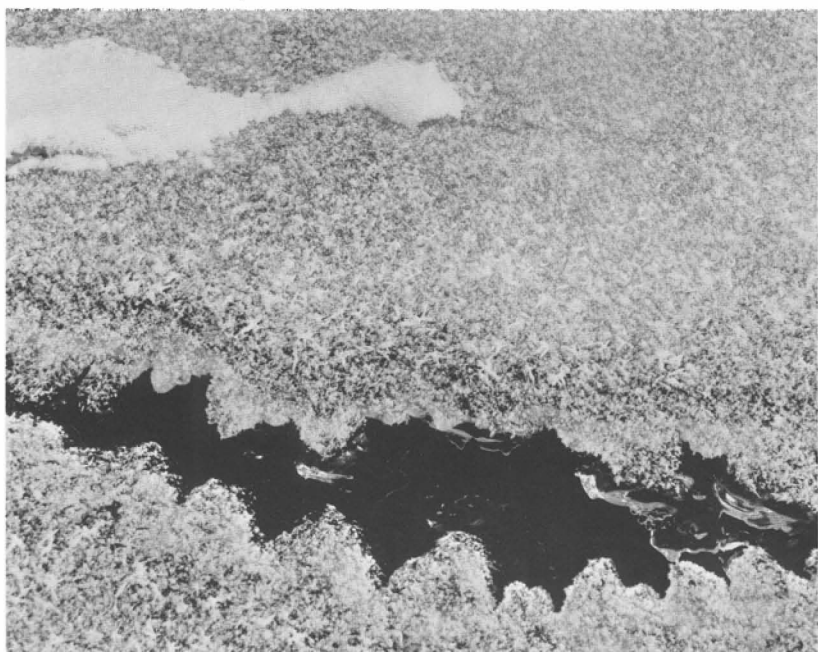




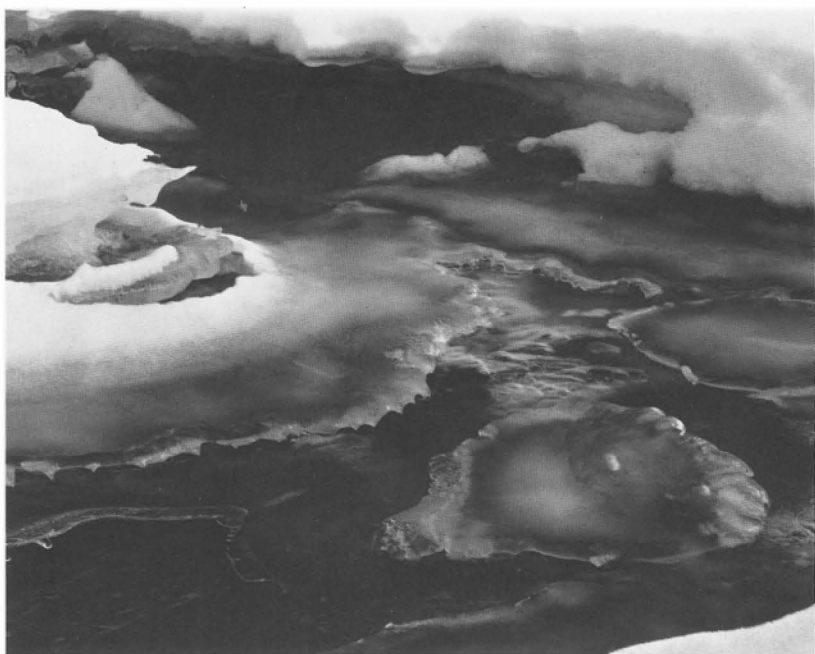


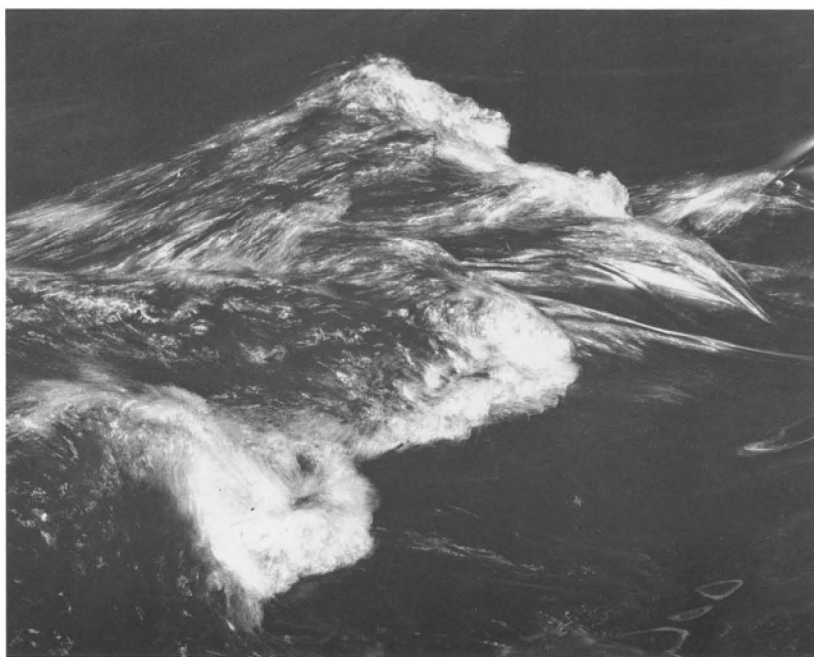
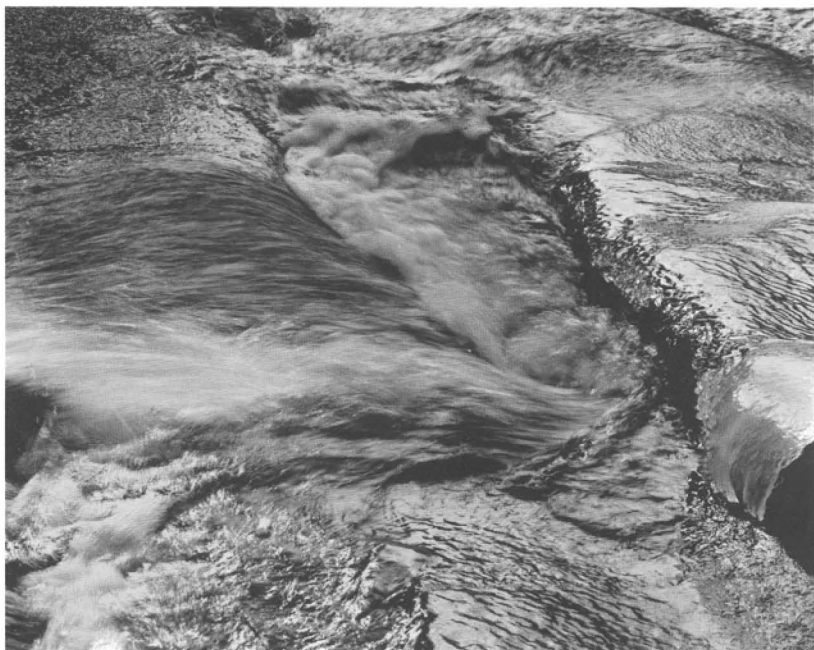












West River Valley near Dummerston, Vermont

Fred Picker

ZONE VI Newsletter

Number 50, May, 1987

"A certain amount of contempt for the material employed to express an idea is indispensable to the purest realization of this idea."

Man Ray

Although this Newsletter was intended to contain an update on use of the Zone system, it might be more important to explore promptly the two new Kodak films that are getting a lot of attention. No one seems to know if Kodak will discontinue the old films. Tri-X is such an extraordinary material that its loss, unless it was replaced with something as good, would be a telling blow to almost all of the outstanding print makers. The new films are rated equal to Plus X and Tri-X in speed and are called T-Max. According to Kodak literature, they have "T-Grain Emulsion Technology" which gives them a "flatter more uniform tabular grain that provides a greater surface area capable of absorbing more light, as well as larger amounts of sensitizing dyes and other chemicals ...you no longer have to choose between fine grain and high speed-you can have both!"

I didn't test the slower film because for 35mm, which is properly used hand held and for photographing active subjects, you need all the speed you can get. And for large

format, especially 8x10, the longer focal length lenses usually require you to stop down for sufficient depth of field. A fast film is therefore necessary if very long exposures are to be avoided.

Why do we need a new film? What's wrong with Tri-X? In my opinion, almost nothing. It is one of the two light sensitive materials currently available that has the mysterious capability of creating an impression of space and presence and richness in a print. The other is Brilliant paper. Tri-X could be improved by higher speed, greater sharpness and finer grain. That's no indictment; that combination would improve any film.

Kodak sent me some T-Max 400 35mm to try against Tri-X. To find out which is faster, I had to give both films the same (not similar) exposure. In the dark, I pulled out and cut off four five inch pieces of each and taped them side by side in a 4x5 holder. On the other side of the holder I taped another pair of strips to be used for another purpose.

I set up a 4x5 camera, focused on infinity, then aimed at a dark card, pulled the dark slide half way out (to give me some unexposed film base for future measurements) and gave the films a Zone I exposure. The films on the other side of the holder were given a Zone VIII exposure.

Then I loaded a roll of Tri-X into a 35mm camera, put the camera on a tripod, and photographed a landscape that included bare

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tree branches against the sky, a row of pines, and snow in sun and shade. The sky area would suffice for grain comparison and the sunlit snow and the close tonal values of the pines would indicate contrast characteristics. The branches would indicate differences in sharpness. I exposed a frame at 1/500 at f/16 -a sure underexposure for Tri-X under any front-light conditions- and subsequent frames were exposed at 1/500 at f/11, 1/500 at f/8, and 1/500 at f/5.6. Then I loaded the T-Max and gave it the same series of exposures.

The Tri-X development instructions suggest seven-and-a-half minutes (which is much too long) in HC-110 dilution "B" at 68 degrees. The T-Max instructions say six minutes. I decided to give the T-Max the benefit of the doubt and developed both films for six minutes. Kodak says the speed of T-Max is 320 developed in HC-110; 400 in D-76. They say Tri-X is 400 in either developer.

I developed both films for six minutes followed by normal stop, fix, wash and dry. Kodak says to fix the new film longer so I pulled both off the reels after a few minutes of fixing to see how long it would take the T-Max to clear. It took six minutes, so I fixed it for twelve. Five minutes suffices for Tri-X. Also, Kodak says that T-Max wears out fixer more quickly. The Tri-X was over-developed and too contrasty for the normal subject, as I knew it would be, in spite of the fact that it received a minute less development than Kodak suggests. (Though I regularly develop 35mm for printing on grade 3 rather than grade 2, -see Newsletter #47- these negatives were over-developed even for grade 2.) The T-Max had even more contrast than the Tri-X and was unprintable on grade 2.

The densitometer showed the Tri-X was a shade faster but close enough so you could call the speed the same. But the Zone II, III, and IV values in the T-Max negatives were thinner than the equivalent Tri-X values, indicating a longer and lower toe in the T-Max. The high values of the T-Max negatives were denser, but the development time was not ascertained by test but by Kodak's direction and could be modified to quiet the high values. But reducing the T-Max development time would be detrimental to the already weak low values. To strengthen them would require more exposure but that would effectively reduce the speed of the film. But more exposure would require shorter development time which would weaken the low values and where it stops, nobody knows. As Yogi Berra so beautifully put it, "It's deja vu all over again."

To find out about sharpness and grain I made enlargements, BIG enlargements, of the sky and tree branch sections of the two negatives that the "proper proof" had indicated were the best. The image on the easel was 13" long; far bigger, I think, than 35mm should be printed. The grain of both prints appeared identical. I examined the prints side by side under a big magnifying lamp that I use for print spotting. I still couldn't see any difference. I took the prints to the office and showed them to Richard Ritter, who is a real hawk. He could not see any difference.

The T-Max print appears sharper. The branches stand out stronger against the sky. And the T-Max exhibited greater internal contrast once the values got clear of the toe. (The close values in the evergreens and the

dense stand of hardwoods are better separated.) It is a well known fact that higher over all contrast and stronger separation of close values produce an impression of greater sharpness. Because the over all contrast of the T-Max negative was greater and so was the internal contrast, this higher contrast might be the reason for its sharper appearance.

For 35mm, it's a close call. I prefer the smoother gradation of Tri-X in the high values and the stronger low value separation but you may prefer the real or apparent increase in sharpness. For you, the new film may be worth switching to. The only way to find out is to make a lot more pictures than I did.

The 4x5 T-Max arrived in mid-February. I made a film speed test and found it slightly slower than Tri-X, but not enough to bother about. Rather than interrupt a great period of winter photography with development time tests, I loaded twenty-five holders; Tri-X in the even-numbered sides, T-Max in the odd-numbered sides and got back out there. I spent three lovely days making personal photographs; an identical exposure on both sides of each holder.

Though Kodak had recommended 7.5 minute development for T-Max sheet film at 68 degrees for starters, the 35mm had been so overdeveloped at their recommendation that I figured I'd work up to it. I developed one sheet of T-Max with the Tri-X negative of the same subject for my normal developing time of 5.5 minutes. The T-Max was flat as a pancake.

After I had developed the rest of the Tri-X, I developed three more T-Max films, moving one into the stop bath after 6.5

minutes, the next at 7.5 minutes, and the last at 8.5 minutes. Sheet film also takes 12 minutes to fix. When I "proper proofed" them with the same pictures made on the Tri-X I found that the 6.5 minute film was much weaker than its identical Tri-X negative and the 7.5 minute film was much contrastier. I was getting uneasy; the difference in contrast was a lot more dramatic than a one minute change in development time would indicate.

I developed one sheet for seven minutes and proofed it with its Tri-X equivalent. It was too contrasty. A lot too contrasty! I'd guess at least a half a paper grade. This was getting silly, but I'm stubborn and was absolutely determined to root out its development time no matter where they had hidden it.

I developed three more films; one, for six minutes forty seconds, another for six minutes fifty seconds and a third, as a check, for seven minutes. Triumph! The six minute forty second film had exactly the same overall contrast (same Zone I and Zone VIII densities) as the Tri-X five-and-a-half minute film. I developed the remaining T-Max films for six minutes and forty seconds. Exactly.

The reluctance of latter-day films to respond actively to moderate increases or decreases of development time, together with some imaginative printing techniques, usually makes close-enough, good-enough. But not with T-Max. Here's a film that slips off the ridge with a ten second change in development time. Did you know that a mere one degree difference in film developer temperature is equivalent, over a seven minute period, to a 36 second difference in time? Even a $1/3$ degree change is equivalent to a ten second increase or

decrease in development time so even if you could read a thermometer to 1/3 of a degree of 68 degrees and get off to a precise start, there's no chance to hold that (or any) temperature for seven minutes. No temperature control valve can approach one degree accuracy and a still water bath is useless; it changes temperature exactly as quickly as the solution in the tray or tank. Try it. The truth is, there is no way any one will get the development time right even once, never mind consistently, without a compensating developing timer.

Note: Just before taking this Newsletter to the printer, Tim Frazer called from Idaho. Tim is a staff member of our workshops, the head of the photography department at the University of Idaho, and a fine photographer and print maker. He, without prompting, told me he was having a terrible time developing the T-Max 400. He said that the contrast varied wildly, even with sheets from the same box. I told him I thought it was developer temperature meanderings that caused the problem.

I set up up the enlarger for a 19"x24" image and made 8x10 prints of identical sections of matching T-Max and Tri-X negatives. There was a slight difference in the appearance of the grain. The T-Max was smoother and sort of mushy, like the grain you get with a fine grain developer. The Tri-X grain looked sharp-edged. I could not be sure which film was sharper. The Tri-X appeared to be, but that could have been an optical illusion because the gradations of the Tri-X in the high values was so much better. It smoothly separated the delicate values in Zone VIII while the T-Max piled them into one

homogeneous lump.

I then made two full negative 8x10 prints. The Tri-X print is smooth and full and the high values are delicate, the T-Max print looks like the offspring of a Plus X negative printed with a condenser enlarger.

Because of the impossibly precise time-temperature combination necessary to achieve consistent density and the nasty high value gradation, I have a feeling that there is something very wrong with the HC-110 T-Max combination. It's just a feeling. It seems to me that there must be some way of formulating a developer that would be more forgiving to normal developing time-temperature variations and could tame the brutal high values.

I asked a friend who is in the film business (he designs emulsions for a big company) why Kodak would bother to make T-Max when they already have the best films around. He told me that the "T" technology allows silver grains to be flattened out to near two dimensionality. The result is that more film base can be covered with the same amount of silver. He also said that a "new, improved" product historically increases market share.

After all this testing, I spoke to several of the technical people at Kodak and they advised that they were aware that care had to be taken to get the development time just right. They also told me that there is a new, as yet unavailable T-Max developer! They are sending me some along with more 400 speed film and some 100 speed film. Stay tuned.

*

The above was written before I read an article concerning the new films written by

John Sexton for Darkroom Techniques. John is an old friend, a fine photographer and printer -he was Ansel Adams' assistant for many years and still prints Ansel's negatives- and a popular instructor at numerous workshops. I called him at his home in Carmel Valley and told him of my experiences and he advised that most of the work he had done concerned the slower film. I asked him if he would review the forgoing and make any comments that occurred to him and he kindly agreed to do so.

*

"My experiences with these two films are somewhat different than yours. I have been working with the prototype and production emulsions for the past 1-1/2 years, since Eastman Kodak asked me, and others, to test these new films for them.

"My initial tests were similar to yours: conducting personal film speed and developing time tests, as well as side-by-side comparisons with my film-developer combination of choice, Tri-X and HC-110. These are the most demanding tests I know of: attempting to make personally satisfying photographs for myself. Most of the tests were done in 4x5 and 5x7 formats.

"In the large format negatives I was unable to see any grain difference between T-Max and Tri-X until very large prints were made. With extreme enlargement T-Max 400 has slightly finer grain than Tri-X. With expanded

contrast from overdevelopment, I found T-Max 400 held a tighter grain pattern than Tri-X. The T-Max 100, on the other hand, showed visibly finer grain, even on prints as small as 8x10" from a 4x5" negative. This excited me about the possibilities of the new T-Max 100 film!

"I have not found the highlights on T-Max to be "brutal" compared to Tri-X. Definitely there is higher contrast in the highlight region of T-Max. I find I have to burn in more often with T-Max 400, but am able to make prints with equally subtle highlight gradation. There is greater highlight separation with D-76 than with HC-110.

"The T-Max 100 film has a smooth palette of grays, smoother than I have experienced on any other film. I like the results obtained using both HC-110 and fresh D-76.

"Kodak advised me that the T-Max films are more sensitive than conventional emulsions to variations in development: time, temperature, agitation, etc. The new films expand and contract more easily and successfully than conventional films. Therefore, to achieve consistent results, any variations in procedure must be eliminated. I absolutely do not find the kind of contrast variations that you experienced in your tests. I have processed over 1,000 sheets of T-Max emulsions, many with sensitometry along with images, and

find I am able to obtain consistent and repeatable results. I can't explain why you obtain such radical results -Vermont water?

"Note: If you process in D-76 it must be FRESH for consistent results. The contrast increases significantly when processed in older D-76.

"With exposures from one second to a few minutes, these new films do not require nearly as much exposure compensation as Tri-X for reciprocity failure compensation, thus giving me an effectively higher speed when I need it most. At a certain point, T-Max 100 actually becomes faster than Tri-X for long exposures -a great advantage to me (however possibly not important to others who do not work with long exposures).

"I use T-Max 400 at ASA 160, and T-Max 100 at ASA 64.

"It is advisable to use Rapid Fixer on the new T-Max films. This should allow complete fixation in 5-6 minutes.

"To summarize, I like T-Max 400 about the same as my good friend, Tri-X. However, with increased development of T-Max 400 I achieve finer grain, a greater degree of sharpness and a higher speed film for long exposures. My real favorite, and perhaps the most beautiful film I have used for my own photography, is the new T-Max 100. It

has non-existent grain, an exceedingly smooth palette of grays, and a wonderful feeling of light. In addition, both T-Max films allow greater flexibility in terms of expanding and contracting contrast.

"Hope this information is of value to your readers. Thanks for letting me take a look at your manuscript."

John also mentioned that he had spoken to the Kodak people and been advised that the difference in amounts of silver used for the two emulsions was insignificant. Thank you, John. There is much of value in what you wrote. I will surely try the 100 speed film though I fear that for much of my work (brooks, woods, field animals, portraits) the slow speed will constitute a serious problem.

Perhaps the greatest value of this whole Newsletter is to point out that serious photographers go to work (as you and I have done). They insist on finding out for themselves which materials and procedures will help them achieve their creative potential.

Thank you for all the very nice letters about the brook pictures in the last Newsletter. I hope you liked looking at them half as much as I liked making them.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 51, June, 1987

TRY IT

Authors stamp useful for
answering many letters.

This Newsletter marks the thirteenth year of Newsletters. In all that time the Zone System was not discussed except in brief descriptive language--photographer's shorthand--"the beech tree was placed on Zone VI, the dark rock fell on III," etc. I gave it so little attention because, compared to the more creative and more interesting aspects of the medium, so consistently ignored in photographic literature, I don't think it is very important. (Atget never heard of it, nor did Stieglitz or Brady or Lartigue or thousands of other outstanding photographers.) But the last few Newsletters, interrupted by some pictures and a discussion of a new film, were designed to update the Zone VI Workshop book, so I'll do a little Zonal updating, too.

I discovered the Zone System. Actually, Ansel discovered it but I didn't know that until later.

When I first started photographing, I couldn't figure out why my exposures were inconsistent. I read books that said, "point

your meter at the ground," others that said "expose for the shadows" (I still don't know what that means.) I had my shutters checked. I bought another meter. Nothing worked consistently. One day I figured out a way to find out what really happens.

I made a meter reading of a white painted wall and made an exposure according to the meter's direction. I had "placed" the wall on Zone V. I "proper proofed" the resulting negative. (I discovered the "Proper Proof!") The negative, "proper proofed" for the minimum time to render the paper black through the film edge--see Zone VI Workshop page 38 --produced a gray print of the white wall. To make the white wall white, there were only two possibilities; expose more or expose less. Less was silly. The negative was already too thin; it had insufficient light-stopping power.

I went back to the wall and made a half dozen negatives. The first was exposed a stop more than the negative that produced the gray print and each succeeding negative was exposed one stop more than the last. I "proper proofed" them with the original (Zone V) negative and each produced a print value one stop (Zone) lighter than the last until they could get no whiter. The last few had been exposed at Zone IX and higher; unprintable density.

So, for several years I determined film exposure by reading the high value and opening up one, two, or three stops, depending on how

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white I wanted it to be in the print. The proper proof showed that I couldn't expose more than three stops above the meter reading without losing tone. I could find no reference (and still can't) to anyone else using this method. But it worked fine. When I attended the Yosemite Workshop I learned the more sophisticated applications of this principle.

I've learned since writing The Zone VI Workshop and through almost fifty workshops that, for many people, the system has a sort of mystical power. I've heard people say they were "going to really get into the zone system some day when I have the time" or "set up a darkroom for Zone work" or "go to a Zone System Workshop."

Nonsense. The Zone system is ridiculously simple. After you "place" one value you make meter readings of other values to see where they "fall." Before exposure, you can visualize the print values. To know what your print values look like, it is essential to make up a set of print value cards. See Zone VI Workshop, page 36. You then accept your original placement, or change it, or reject the picture altogether. You might occasionally make a notation regarding longer or shorter negative developing time. That's it.

The Zone system is not a new religion, nor will it "change your life." It's just an exposure method that makes field-usable the simplest basics of sensitometry. The basics are: More in-camera exposure produces more negative density and less in-camera exposure produces less. And more development increases negative contrast (by adding a disproportionate amount of density to the high values) and less development reduces negative contrast.

Most people haven't the slightest idea what is out there in terms of brightness range and reflectance. They don't know the difference between subject brightness --color-- and subject reflectance; the only thing that effects black and white film. Many professionals, and the few photo writers I've read, think that if they make a photograph of a black and white card or a black through a series of grays to white step wedge or a black and white photograph or a charcoal drawing or a painting or a printed page, the print will reproduce the values of the original. Wrong. We even get meters back for repair from people who meter a printed gray scale and find that the meter indications don't agree with the "Zones" on the gray scale!

What's out there under normal sun and shade conditions is a range of seven Zones or less. That's all. Seven.

For every thousand people who read the paragraph above, I would guess that all but one will, without changing his physical position, gravely form an opinion as to its accuracy. "One," however, will actually try it. He will rise to his feet, get two cards and a meter, take them outdoors, and find out if the following is true:

He will place a black card and a white card side by side in shade and read each with his meter. He will find about a four stop (Zone) difference (unless the black card is lamp black or covered in black velvet and/or the white card is especially shiny). If both of these unusual conditions exist, there might be a four-and-a-half stop difference. If he then moves both cards into the sun, he'll get about the same difference; four stops, more or less.

Therefore, when both cards are in sun or both are in shade, if he places the black card on Zone 0 to get it black, the white card will fall between IV and V and his picture, should he make one, will show a black black card and a middle gray white card. If he places the white card on Zone VIII to get it white, the black card will fall on about IV and his picture will show a white white card and a middle gray (Zone IV) black card. A black card and a white card under the same illumination reflect a four to five stop difference. Try it.

When "One" meters the white card in shade and then in sun, he will find a two-and-a-half stop difference, three in unusually brilliant conditions. When he meters the black card in shade and then in sun, he will find the same two-and-a-half or three stop difference.

By now it is obvious to him that to create a full-scale photograph of a black and a white card (equivalent to the extremes in reflectance of the things we photograph) he must put the white card in the sun and the black card in the shade. Under those conditions, the meter shows that the white card falls on VIII when the black card is placed on I or vice versa. The difference in reflectance of the cards, four-and-a-half Zones, plus the difference that sun and shade create; two-and-a-half Zones add up to seven Zones.

To see this in a print, he takes a picture which includes the white card in sun and the black card in shade. He can make a print from that negative on grade 2 paper which will show two Zones less than the full D-Max black to paper base white range of the paper. (Zone I shows a trace of tone and

Zone VIII does also.)

Under field conditions, tiny areas of dark values in super-shade (cracks in wood, broken or missing cellar windows) will fall below Zone I and print pure black. Tiny specular reflections will print pure white.

The range is greatly increased by glare angles, which are really large specular reflections of the light source and/or deep openings into dark, essentially lightless places. In clear weather backlit situations, light is skimming into your lens like a stone skimming across the water and the contrast is far too great for the range of the film. In fog, you can usually retain tone even with back light.

With a seven Zone subject there is no latitude in exposure if the lowest value is to show a trace of tone above black (Zone I) and the highest value a trace of tone below white (Zone VIII). But if the subject is all in sun or all in shade or the light is soft, which produces about the same four stop contrast range as all sun or all shade, or the subject matter does not contain a full range of values from black to white or, if it does, the white is not in sun and/or the black is not in shade, or if the subject matter is inherently reflective and fills shadows (snow and light sand reflect lots of direct sunlight and open skylight into shadowed areas) or if the surface of the white is matte and the black is reflective, the range will be less than seven Zones. Because at least one of these conditions usually exists, our subjects usually contain less than seven Zones.

With less than an eight Zone range, why can't you place the values anywhere between the eight Zones of your Zone dial? You can,

and you would have a printable negative. But not, in my opinion, the best negative.

When I first learned (and taught in workshops and the Zone VI Workshop) the Zone System, I followed the rule. Sort of. The "rule" is "expose for the shadows, develop for the high values." Actually, I practiced and taught, "place the value you insist on." But after a whole lot of negatives, I found myself constantly breaking both the "expose for the shadows" rule as well as my own modification. It had finally dawned on me that when I made two exposures of a subject (to be absolutely sure I had enough exposure) the "overexposed" one always made the better print. Right? The best negative is the one that places all values as high as possible without blocking.

So I began to consistently place the high value on VIII, regardless of where I wanted that value to end up in the print.

I have made thousands of negatives that way and I am convinced that there is no faster, simpler, more foolproof way to get the best possible negative. I've been teaching this procedure at workshops for many years and hundreds of photographers have been delighted to find that it always works. I call my modification of the Zone system, "Maximum Printable Density (MPD)." Note: The operative word is "printable," not "maximum!"

A graph of film exposure shows an "S" shaped curve; the H and D curve. The low values fall on the low sloping "toe" and are not very well separated. The values above Zone III through VII or VIII fall on the "straight line" and are very well separated. The values above VIII fall on the "shoulder," are poorly separated and are said to be "blocked." The reason MPD produces the best negative is

simply because it moves the low values as far up the toe or on to the straight line as they can go. So much for "exposing for the shadows and developing for the high values!" (MPD exposes the high values on VIII to give you the strongest possible low values.) So much for "the thinnest possible negative." (MPD creates the densest possible negative.)

MPD is a two-step Zone system. Step one: Place the highest value on Zone VIII. Step two: Take the picture.

I always expose for maximum printable density, except sometimes. I expose less when I know I will want a large contrast increase. To increase the contrast, I place the high value on VI-and-a-half (rather than VIII) and develop plus one-and-a-half. (See Newsletter #47.) One way or the other, by exposure or development, all my high values end up at maximum printable density.

MPD is an uncomfortable concept for old hands to accept. In a medium where, to separate the pros from the amateurs, intricate processes and procedures are regarded (promoted?) as "advanced" by teachers and writers, simplicity and speed of absorption is anathema.

Though most students love it (all 35mm users love it), to a few, MPD is scary. Rather than devoting a lifetime to an in-depth exploration of the practical and metaphysical ramifications of the Zone system, they find there's nothing left to do except make photographs.

Using MPD you will find that short scale subjects such as a portrait in shade, where the flesh tone is the highest value, will appear too light in the Proper Proof. But as long as the proof shows tone in the high

value, regardless of the subject matter, there is no problem.

There is an aspect of the Zone system that is usually regarded as vital. It has to do with the previsualizing of the print in all aspects. In my opinion, no one really can. Certainly anyone can visualize the print in shades of gray and an accomplished photographer can note the most insignificant details of the composition but no one knows at the time of exposure the answer to the only important question; did he merely skillfully record what was there (made an admirable picture) or will he see in the print that subtle and evasive something wonderful.

Consider: Many thousands of unprinted negatives indicate that anyone's ability to visualize at the time of exposure in the most sophisticated terms, the emotional content of the future print, is pretty crude. If we could really do it, how come you, me, and the greatest photographers in history, take so many pictures that excite us at the time of exposure but the prints contain no more emotional wallop than a postcard? Even though the great photographers get a higher percentage of "keepers" than ordinary folks, they also get a lot of near misses. The truth is that the balance and complexity of ingredients that make up an extraordinary photograph are so ephemeral they can be "previsualized" only up to a point. The transformation of real objects onto a two dimensional plane, rendering their colors in black and white, and radically changing the subjects' size make it extremely difficult to foretell the emotional power, if any, the print will contain. So often the most exciting moments in the field are disappointments in

the darkroom. But sometimes you just know. Strand made about nine negatives of the wondrous cobweb in Maine. He knew.

What can you do? You have no choice but to be tough on yourself. Do a lot of work. Do it the absolute best you can regardless of the difficulties you may find. Photograph only what excites you (never what you think will "make a good picture") and hope that the law of averages is operating.

An update on the T-Max story. Kodak sent me some of the new T-Max developer and some more 400 speed and 100 speed 4x5" film. They advised that the T-Max developer was not only for the T-Max, but was also good for Tri-X. (It's not too bad for Kodak stockholders either; it costs a whopping \$20.00 a gallon for working solution, about four times as much as HC-110.) I made a Tri-X exposure, cut the negative in half, and developed one half in HC-110 and the other half in T-Max developer. The T-Max cost about a half stop of speed and oxidized in the tray at a terrific rate.

To try the T-Max 100, I started with a film speed test, found the speed two-and-a-half stops slower than Tri-X, loaded the even-numbered sides of the holders with Tri-X, the odd sides with T-Max 100, and went out photographing. After each picture on Tri-X, I'd open up or decrease the shutter speed and open up and expose the T-Max.

I developed the first sheet for the recommended time in HC-110. Weird stuff. It's pink and I don't care how long you wash it, parts of it stay pink. The negative looked dead and printed that way. I developed the

second sheet for a minute more, the third I pulled after two more, and so on for five sheets. The prints went from gray and lifeless to harsh and chalky, depending on the length of negative development. Prints from the Tri-X negatives of identical subjects were rich and brilliant.

John Sexton reported good luck with this film so the chances are I'm doing something wrong. (Following the directions, which I did, doesn't always mean you're doing it right.)

There's so much interest and so much difference of opinion about these T-Max emulsions that it might be interesting to see some other results and compile some statistics. Film tests in magazines (and Newsletters) are usually one-person-opinions, but if you would like to get into the act and undoubtedly learn something in the process, I'll keep score and put the results in the next Newsletter.

Make two negatives of the same full scale still subject (no portraits--slight changes in position affect reflectance, etc.). Use a tripod so camera movement can't occur. Use whichever T-Max film you are curious about and your regular film to compare. Make two prints that match as closely as possible. Use the same grade and brand of paper and the same print developing time for both.

Send them to me. If you want them back, include a self-addressed envelope. Write on the back of each print the film used, the exposure in the field, the negative developer used and the negative developing time. Indicate which print you prefer and why.

I just returned from a trip to Alaska where I taught a workshop at Sheldon Jackson College in Sitka. The workshop was arranged and orchestrated by L.J. Evans who attended our Putney workshop last summer. She did a fine job; a regular junior Lil. One of the students, Marion Stirrup, was also here last summer. She lives on Kodiak Island and kindly invited me up to fish.

The country and the wildlife in Kodiak are beautiful, but the best part is the friendship and hospitality and laughter provided by Marion and her husband, Eric, who is a very professional fishing and hunting guide. His "Ten Bears" is a comfortable fifty footer in which he can get you to wild rivers. If you are interested, call Eric Stirrup at 1-907-486-5079.

Several cancellations have made space available in the August workshops. If you would like to come, please call 802-257-5161.

With best wishes,

A handwritten signature in black ink, reading "Fred Fisher". The script is fluid and cursive, with the first name "Fred" and last name "Fisher" clearly legible.

ZONE VI Newsletter

Number 52, September 1987

"I love best to have each thing in its season only, and enjoy doing without it at all other times.

Henry David Thoreau (1817-1862)

Processing in volume.

My first "job" in photography was night work as an unpaid lab rat. I developed film and prints for Ken Missar, a free-lance photographer who did some overnight processing for others. On arrival, Ken handed me a roll of 120 film and a reel and told me to load the reel 100 times with the light on. Two hours later, he told me to load it 100 times in the dark. I haven't kinked a roll of film since. Kinking the film as you load it produces those little thin half moon marks that render a negative unprintable. When Ken was satisfied that I could load 120, I was allowed to try my hand at 35mm which, being stiffer, is easier.

The next step was developing the negatives and that was done by loading the roll film reels into a three-and-a-half-gallon tank and agitating by timed gas burst. Sheet film is the easiest film to develop. Ken saved my training in it for the last. Although he had the most up-to-date equipment, Ken insisted on tray development of sheet film because: there is no agitation method as thorough; and there is a strong risk of damage

from hangers; and the time-wasting bother of loading and unloading hangers is eliminated. Developing in hangers is not only laborious but it requires you to make up three-and-a-half gallons of developer, stop bath, and fixer every time you want to process. The alternative to the big tanks is worse; developing six sheets of 4x5 at a time in those little toy "daylight" tanks. Coming back from a trip with two hundred sheets and facing that future would make you a 35mm addict! And trying to print the streaky skies from negatives so developed would make a strong man weep.

Because there is no water circulation around the film edges, which is the area that is most susceptible to deterioration, sheet film should never be washed in hangers.

As before, I had to practice. First an hour agitating four negatives with the light on, then eight, then twelve. The secret is to go slow; you only have to go through the pile once in thirty seconds. Draw the bottom sheet out, place it on top, push it gently under with your left thumb. The emulsion stays up. (Feel the notches with your right index finger.) Then lights off and do it again. After two hours I was able to safely handle twenty 4X5 negatives. Little practice is necessary for 8X10's. They are even more easily handled than 4X5's but rather than twenty, eight at a time is enough.

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I spent four or five hours learning to develop film. Since then, I don't think I have ruined a single negative in the darkroom. A pretty small price to pay, I think, but many photographers don't bother to make even that small investment. They play Russian roulette every time they develop film.

My job for Ken was to load and develop about 150 rolls of 120 and 35mm film every night. Then I'd clean the tanks, set up the trays, and process the sheet film. Because the work was for professionals who needed negatives and proofs by the following morning, speed was required so all films were hung in a drying cabinet.

In twenty minutes we could proceed to proofing, processing, filing, and packing.

Just as boring but more lucrative (for him) than developing film was the making of 1,000 prints twice a month for the Cunard steamship lines. It was always a different photograph but it always looked the same; an aerial view taken from a 45 degree angle off the port bow of a steamship entering New York Harbor. The undeveloped film would arrive at 5:00 in the evening and the prints had to be ready by 7:00 the following morning. Ken's printing procedure was straightforward. He used a powerhouse 150 Watt bulb in a 4X5 condenser enlarger. The bulb got so hot that it would fry a negative in a few seconds but it was so bright that the printing exposure took only a fraction of a second. It looked like a strobe when he fired it off. He would count out the paper into 15 sheet stacks and after he exposed 15, I would take them across the darkroom, fan them out like a poker hand, peel them off and one by one push them face down into the Dektol.

The reason for a three-minute developing time rather than the usual two was that it would take ten or fifteen seconds to get all the prints in, face down and one-by-one, and fifteen seconds is a smaller fraction of three minutes than of two, so differences in density would be slight. Also, with that many prints in the tray, you could do a better job of agitating if you had a bit more time. By starting a new batch of 15 every four minutes, you would develop 225 prints per hour.

You fanned them out in your left hand, face up, then picked off the top one and pushed it under the developer with your right hand. After they were all submerged, you pulled the bottom print and turned it over (face up) put it on top of the pile, pushed it under, and so on 'til you were through the stack. Note: When developing sheet film, the emulsion remains face up throughout the operation.

Ken made the prints on single weight 8x10 paper which made handling them in the trays extra nasty. Economy was the watchword. Digression: It is amazing that publishers insist on 8x10 prints when they are going to reproduce them at 2x3 anyway. Even photo magazines often ask for "8x10 glossies." If you are ever going to make a book and can control the editors, tell them that the best reproductions come from same-size prints. And give the printer a print of exactly the same contrast and density (lightness or darkness) that you would like to see in the finished reproduction. Printers can adjust contrast or density as easily in their halftone negative as we can in the darkroom and they can make additional small adjustments on the press. If you give them something different from what

you want, with instructions to "brighten it up a bit," you will surely be disappointed. If you are at the press for the start of the run, as you certainly should be, insist that they match your print as closely as possible. Don't expect wonders, however. If the reproduction of your print is more than 50% as effective as your original print, even by the greatest presses, you are doing well. End of digression. (End of this digression. Someone advised me that I should consider the phrase, "Where was I?" for an epitaph. Perhaps a pair of parentheses would do as well.)

After three minutes of agitation I would transfer the prints to Ken's wife who was manning (personing?) the stop-bath phase. From there they would go to whomever might have dropped by. He or she was assigned the fixer tray. By then I would be busy with another fifteen sheets.

The trays were 16x20 and they held three gallons of solution. Big trays and plenty of solution are the secret of easy print handling. Though the single weight paper indicated that Ken watched the pennies, he never skimped on the chemicals. You get stains and weak prints from overworked solutions and that's poor economy. Brown stains usually indicate overworked or incorrectly diluted developer; blue stains usually mean tired fixer. Ken used the Kodak recommendations as a guide but only processed half as much paper per gallon as they recommended. He used two fixer trays. This was convenient as well as good procedure because the fixer person could move a batch into the second tray to keep them from getting mixed with the incoming batch which was only three minutes behind. Because the first fixer tray does the heavy work, the

second fixer tray stays in good condition for a long time. We would dump the first tray every time we changed the developer and stop bath, put the second fixer tray where the first was and make up a fresh second fixer tray. From the fixer the prints would go into a running water storage tray and finally into a big drum washer for fifteen minutes. They only had to last until the next boat arrived! After 1,000 prints our hands were as shrivelled as prunes.

After the wash the prints went on a fixer-encrusted gas-fired Pako rotary dryer. Feeding them in and peeling them off the drum is something I would not care to experience again.

To end up with 1,000 usable prints we would have to repeat the fifteen-print developing routine about 70 times. We tried to maintain a party atmosphere with a little frivolity, a little music, and a little wine but along about 4:00 AM we would start to unravel.

If you long to be a pro or have a friend or offspring who thinks it's a lucrative and glamorous life, let him sign up with a working pro for lab rat status. If he doesn't stick it out, at least he'll have learned something about the depth of his love for the medium.

Ken paid me well. He knew what he was doing and made sure I did, too. He looked at my pictures, took me on assignments from time to time (where he taught me to carry things). Perhaps the most important thing he taught me was the primary difference between a pro and an amateur; a pro is focused on performance. He must produce tangible results (actual pictures). Though many assignments seem to contain insurmountable difficulties (if they

didn't, an amateur could do them) no one in business will tolerate tales of difficulties or near-misses or reasons for being late. Failure is out of the question. A pro either solves problems or suffers malnutrition.

Although I have never made a thousand prints in one session since then, I make 120 prints at a time for the Zone VI catalog "Fine Print" series and I still use many of Ken's procedures.

I choose negatives that require little or no refinements. I usually expose two dozen prints and develop them in groups of six. That way, if the easel should slip, the negative sag out of focus, a spot of dust find its way onto a sky area, etc. I won't have ruined too many prints.

I used to use two sided sticky tape to hold the easel in place, but it lost its sticky quality quickly and I now use adhesive backed sandpaper-like material on the bottom of the easel. It's the material that is made for slippery stair treads and you can get it in the hardware store. For a large quantity of prints, I also tape the easel in place. The best easel I've ever found for fast work and the only one that provides sharp, square borders is the simple cheap one that Zone VI sells. The fancy adjustable ones don't give you square corners.

After the 120 prints are developed and fixed and getting a pre-wash in the washing machine, I dump and rinse the trays and set up for toning. The prints, in batches of about thirty, are put in a 16x20 tray containing three gallons of fresh hypo and agitated for three minutes. They are then toned in nine ounces of Kodak Rapid Selenium toner in three gallons of water to which a teaspoon of Kodalk

balanced alkali has been added. (See new toning procedure in Newsletter #44.)

Zone VI sells about 5,000 prints a year. I just figured it out: It takes me a half day to make 120 prints or about 41 half days a year. Plus custom print sales and my personal printing. That's far too much printing. I think I'll get a lab rat...

Although everyone agrees that hypo is heavier than water, some insist that it doesn't sink. (They must think it floats; there are no other possibilities.)

Rather than discussing it archivally, (forever) why don't they try this simple test: Take a print out of the fixer, cut off one corner and place it in a stand-up washer like ours or an East Street or just stand it up in a bucket of clean water. Put the cut corner at the top. Don't agitate it or bother it. Take it out in an hour and place a drop of HT-2 at the top (cut) corner and quickly put another drop at the bottom. (HT-2 grows darker as time goes by.) In two minutes you will see some stain at the top and more stain at the bottom. Hypo sinks.

Years ago, when there was not much choice in print washers, most of the serious print makers used East Street Gallery washers. They looked something like ours except that they didn't have the double wall ends and the print partitions were so narrow that East Street included a stick for fishing out the prints. The water gushed in at the bottom, sucking in a lot of air through a pipe. The visual effect was impressive. Bubbles rose in clouds and you would think a lot was happening. It was; the

washer was endlessly circulating fixer. The only water that was replaced was the relatively uncontaminated water that slopped over the top of the tank.

A few smart photographers discovered that they could get a better wash in an East Street washer in less time if they just soaked the prints in it for a few hours. (Leica says that film is well-washed by transferring it from one clean water bath to another every few minutes.) This procedure became universal after the publication of a magazine article by an outstanding West Coast printer. He described his museum-dictated processing procedures for a large number of important Dorothea Lange prints. He used the still water system in an East Street washer but he also drained and refilled it every half hour. If you have an East Street or Gravity Works or Kostiner washer (similar in operation to East Street) soak the prints in still water for three hours with an occasional complete drain and refill. You'll not only get a better wash, you'll use less water. Soaking prints lying down in a tray doesn't work; what fixer leaches out just lays between the sheets.

The East Street people were aware of the problem. They deserve a lot of credit because, realizing its shortcomings, they withdrew it from the market. Unfortunately, this was ultimately their undoing; during the time required to design and get a new washer into production, they ran out of capital and were forced out of business.

I have spoken to several people at Kodak regarding their plans for retention of Tri-X

film. I was advised that they do not intend to discontinue it "in the foreseeable future." The same is true of Plus-X. Their procedure is to review sales each fall and discontinue those items that do not pull their weight.

Many people have told me that their local stores have discontinued Tri-X and now stock only T-Max. A store owner told me that when he ordered Tri-X, they shipped him T-Max. If enough people don't complain, the store owner will have no incentive to carry Tri-X. Tri-X will disappear and we'll deserve it. VC or RC paper is a perfect example of what lethargy on the part of the consuming public combined with the power of clever advertising can "accomplish." Did you know that 95% of the paper now sold is slimy plastic and most stores don't stock anything else? Plastic has replaced such exquisite papers as Ilfomar, Cykora, Opal, Varigam, and a dozen more.

One of the more annoying calls I receive has to do with cold lights for printing on VC paper. I usually ask the caller why he bought a Rolls Royce for the transport of manure. This gets a small (or no) laugh and a patient description of why it is necessary for his unique work. Nonsense: I do more work, personal and professional, than anyone who has ever called me and I would never make a print on that junk.

This summer we decided that the workshop staff will no longer critique RC prints. If a student doesn't take his work seriously enough to present it with dignity, why should serious photographers have to look at it?

Anyway, here's how VC paper works. It's simple. The yellower the light, the lower the print contrast. Bluer light produces higher contrast. Cold light is bluer than tungsten

but condensers increase the apparent contrast by blocking the high values so, as far as contrast goes, you'll come out about the same. Anyone could have found that out for himself by making a print on a grade 2 paper and then another on VC without a filter and comparing them. To reduce the contrast of the VC, use a yellow filter. If that doesn't reduce it enough to match the grade 2 paper, use a yellower -lower number- filter. Work at it until you are satisfied. (If you are willing to print on that stuff, you'll be easily satisfied.)

The last Newsletter stated that T-Max developer costs more than it does. The list prices: HC-110, \$9.60 per 16 oz bottle or .60 per ounce or \$2.40 per working gallon (assuming dilution "B" which is 1-31). T-Max costs \$8.10 per quart which, diluted as directed, makes a working gallon. T-Max film costs about ten percent more than Tri-X.

In the last Newsletter I asked for prints comparing the T-Max with Tri-X so we could get a better reading on it than from just my own experiences. I got phone calls and letters.

It's amazing; the artistic future of this medium is on the line as more and more "new and improved" (higher profit) products appear each year. The magazines can't be expected to help. (I'm glad I'm not faced with a Kodak offer for a six figure ad in this Newsletter!) What can you and I do? Figure out your life expectancy, multiply by the amount of film you use in a year and add 50% for good measure. Buy a used chest-type freezer (they are out of style and very cheap) and load up.

Workshops are over and I'm busting to go photographing. Though I have a fall trip scheduled for the Hebrides, which will be exciting, for me the best of all will be right here, along the river valleys of Vermont. By the time I get back from the Hebrides, summer will be far gone, the crystal nights will chill the chuckling rivers and new and wonderful ice and snow shapes will again appear. I have often wondered whether the main reason I photograph is so I can be where I want to be. Do I take my camera or do I follow it?

I recently read a lovely book by a fine writer and fisherman, Roderick Haig-Brown. Although he is talking about fishing, it might just as well be photography. He says, in the final paragraph of, A River Never Sleeps, "I still don't know why I fish or why other men fish, except that we like it and it makes us think and feel. But I do know that if it were not for the strong, quick life of rivers, for their sparkle in the sunshine, for the cold grayness of them under rain and the feel of them about my legs as I set my feet hard down on rocks or sand or gravel, I should fish less often. A river is never quite silent; it can never, of its very nature, be quite still; it is never quite the same from one day to the next. It has its own beauty, and the creatures it nourishes are alive and beautiful also. Perhaps fishing is, for me, only an excuse to be near rivers. If so, I'm glad I thought of it."

With best wishes,

Fred Fisher

ZONE VI Newsletter

Number 53, January, 1988

"Better three hours too soon than
a minute too late."

The Merry Wives of Windsor
Shakespeare

On a recent trip to the island of South Uist in the outer Hebrides, I happened upon a wondrous landscape. A stream cast lovely loops across a sheep-cropped meadow and long sweet hills rose to a horizon shaped by higher hills of darker hue. The swirling clouds were near-black. Sprinkled over the distant fields were a number of farm buildings. When the light broke through the clouds they gleamed brilliantly against the low light of a winter dawn.

The camera position was a long way from the car because there was a power line -the curse of the landscape photographer- parallel to and a quarter mile away from the road. To avoid including the wire in the picture, I would have to get the camera beyond it. The chances of getting to the spot and getting a picture on the first try were minimal. During the few days I had been in the islands, showers and heavier squalls were almost constant. I had spent those days waiting in the car for one of the infrequent clear spells, grabbing an occasional picture and racing back through the rain.

All set up now. The tripod positioned, the focusing sequence under way. Splat. Splat-splat-splat. Expletive deleted. I know the drill by heart: Get the garbage bag over the camera quickly, wrap the elastic shock cord around the tripod head to hold the bag against the blasting wind and rain, stomp hard on the tripod steps to drive the spikes far into the sodden turf, shoulder the bag of lenses and holders and slog back to the car. I'm soaked, the car seat is soaked, the focusing cloth is soaked, and I haven't made an exposure. Picking up my paperback thriller, I determine to stay until dark if necessary. If I stay, I might get a picture; if I don't, I won't. Besides, what else was there to do? Drive around in the rain looking for another picture? Check into a B&B, have a hot bath followed by tea and sandwiches in front of a peat fire? Why would anyone want to do that when he could be rust-testing his lenses and contracting pneumonia?

On the third trip back to the camera, the light that had lured me from the car twice before finally stopped teasing. It not only stayed until I arrived, it had grown more intense. I quickly made an exposure for normal development and then put in my "N plus 1 1/2" film pack (on foreign trips I use film pack) closed down a stop-and-a-half, and made another negative. Splat. Splat-splat, etc. Fair enough.

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I had spent the previous day at Calanish. Between dawn and dusk I had managed just six negatives of that marvelous group of standing stones. The weather consisted of icy showers, intermittent snow and sleet, constant wind, and occasional clear moments. I'd guess the light was good for about three minutes out of every hour. The trouble was, the minutes were not always consecutive so that by the time you were out of the car and half way to the camera, the rain would start again. But when it was good, though it might last all of two seconds before the splat, it was very, very, good and at least there were no other sightseers or photographers to contend with. I knew I was getting unusual pictures.

While I was photographing the stones during one of the few dry spells, a sheep wandered into the area and took up a position that I knew was dangerously near the edge of my frame. I had a holder in the camera and so could not be sure whether he was in or out or a little of each. "Take what you can get and then wait and hope for something better" is my rule so I made a fast exposure, immediately cocked the shutter and pulled the tab to position a fresh sheet of film and waited for something better. Luck was with me. The sheep moved into the exact spot I had in mind, set himself broadside to the camera, looked straight at me, and I tripped the shutter. Except that I didn't: I just squeezed the cable release button ineffectually. I had one of those cable releases that has a collar around the plunger. If the collar turns even the slightest bit, a spring pushes it out and it locks around the plunger. The purpose of this "feature" is to hold the shutter open for a time exposure. Thanks. If I want to hold the

shutter open, I'll hold it by hand. It isn't particularly tiring and what else can you do in a minute anyway? If I want to hold the shutter open for an hour, which perhaps some time in my life I will, I'll set the shutter on "time" or "bulb." Well, the accursed thing had sprung out unnoticed after the last exposure and, though the shutter had closed and that exposure was unaffected, the locked collar prevented the release of the shutter for this exposure. I quickly pushed the collar in and turned it but, by that time, the sheep and the moment had vanished.

That night I wrapped the collar with a figure eight pattern of tape and then wrapped it a lot more so that never again could it do that to me. Previously, all my cable releases either had no provision for time exposure or were of the type with a little screw to hold the plunger in. Neither of those types bite. Happily, the picture with the sheep at the edge has him looking good and nicely placed, but the other one would have been much better. At least I'll always think so.

After making an exposure, I quickly get a fresh film into position and cock the shutter, ready for another exposure. Something unforeseen might happen. I have gotten a few unusual pictures because I was ready. They include a group of Moai on Easter Island that were dramatized by two wildly galloping horses that suddenly appeared behind the statues. I made the exposure as each appeared between the statues. The picture is much more interesting than an identical photograph without the horses. Both of these pictures appear in The Fine Print.

More recently I was photographing an interesting old building in Northern Vermont.

Just after I made an exposure several people came out of a window and walked across an exterior beam. I called to them, they turned, and I made an exposure. The unusual combination, the contradiction, of the structural aspects of a carefully composed, linear subject and the casual poses of the people make the picture more interesting than a picture of either the building or the people alone.

And on a trip to Canada last year I made a photograph of an old doorway near Fitch Bay. Overhanging it was a young beech as graceful as a Degas ballerina. After exposing, I turned the holder, pulled the slide and cocked the shutter before starting away to look for other possibilities in the area. Suddenly a fierce looking, probably feral, cat leaped from the interior of the building into a broken deadlight by the door. I eased back to the camera and immortalized him on the spot.

I've missed more lucky ones than I've gotten. You never forget the misses because they are unique situations that no one could foresee and that never will be repeated. In a graveyard in Ecuador, I was photographing a huge stone entrance way that supported a rather frightening pair of massive wooden doors. Though the sky was dark, the evening sun enriched the scene. I exposed and immediately the gate swung open and a bearded priest wearing black robes and a big sombrero stepped through. He was leading a procession of women, all of whom were heavily veiled and dressed in black. There was one man, extremely tall, also in black, and he was carrying a tiny coffin. The coffin had been freshly whitewashed and it gleamed among the dark figures. For a moment, the group was directly

in front of the camera, framed by the gateway, washed by the beautiful light. I tried to re-load but in seconds they were behind me.

Last year I spent most of December and January, before the rivers froze solid, clawing my way over five foot roadside drifts and through waist deep snow, photographing along the beautiful West River. I got quite a few nice things but nothing really spectacular. One morning at first light I came upon an amazing configuration: Deep windblown snow had been sculpted into rhythmical sweeping curves. Lying in a fold of drifts was a heart-shaped hole, probably eight feet long and four feet wide. Holes through the ice over running water are not unusual. They are formed by the snow building up on thin ice and finally collapsing it when the weather warms or the river level drops. (Or by a photographer who wanders into the wrong place.) But in the bottom of this hole, the strangest ice I have ever seen had formed. It looked like feathers or crystals or frozen fur. Perhaps a skim of new ice had formed on the slow-running water and then early-morning vapor rose, spread over the ice and froze into the feather forms. There was a narrow band of black water encircling the shape in the hole. Each ice feather exuded light and from a certain viewpoint the reflecting sunlight caused the shape of the heart to glow powerfully. Picture a thin black line encircling a textured form of blazing brilliance adrift in a sea of whipped cream.

Andy Warhol said, "everyone gets a fifteen minute chance in his life to become famous; don't blow it," or something to that effect. It certainly looked like my fifteen minutes was now and I wasn't about to blow it.

I had an 8x10 and three lenses and six holders. I had a dozen years and a thousand winter negatives worth of experience on this very river and I knew exactly what I wanted to do and how to do it. No problems; the sky was clear and the light would stay for a lot longer than the few minutes it would take to make an exposure. An exposure? Suppose there is a film blemish? Suppose you poured the stop bath into the developer? Suppose the holder had just this minute developed a light leak? Suppose you drop the negative on the darkroom floor or scratch it or someone opens the door to see if you are in there? For a once in a lifetime opportunity, how about four exposures? How about just wildly wasting six dollars worth of film on three spare negatives? How about developing and printing one negative and then developing the second a little more or a little less and printing it, etc.?

I set up carefully in the spot that would get the reflection just so and arranged the incredible form on the ground glass. This was surely a situation in which the subject was so overpowering that the best thing the photographer could do was to get out of its way. I filled the frame; I wanted the form big, potent. I thought of the wonderful spaces that Edward Weston had created around the three black bowls that he photographed in Mexico and the black shapes he carved against the picture edges in his torso of Neal.

I was mesmerized by the image isolated on the ground glass. As I focused, the blazing ice heart broke in two over the stone that had supported it and sank slowly into the river. The water flowed over the ice feathers and in less time than it takes to tell, I was focused

on nothing more interesting than a dark hole in a sea of snow. If I had been there two minutes earlier, if I had spent thirty seconds less savoring the hypnotic image on the ground glass. If.

Years ago I had another chance, along another river. The subject was far different but just as unusual, just as exciting, just as strong. Maybe stronger. How can you know unless you can compare both prints? That one didn't get away so perhaps, like a cat using up its allocated number of lives, I had already gotten my luck allotment and the frost feathers were not for me. Or maybe I still have a few of my fifteen minutes left; Warhol didn't specifically say that your fifteen minutes have to be consecutive!

Wes Disney and I were teaching a workshop at the University of Vermont one summer. Because classes were in the morning, we were able to spend our afternoons "cruisin' fer snaps." One day, heading home at dusk, we got turned around (Vermonters never get lost) somewhere along a dirt road near Underhill. Meandering along, we came upon an ancient house and barns. YES. The place looked as though it hadn't had a tenant in a hundred years. There were no wires, no sign that it had ever known electricity. The barn contained a dozen hand-carved wooden stanchions. I'd never seen one outside of a museum. The shape of the structures and the silvery tones of the weathered boards reminded me of the exquisite barns and sheds that Paul Strand had photographed in Quebec. Through a window I saw a white apron hanging on a nail. The material where it was sewed to the neck cord had sagged during the years and its weight had pulled it into lace. There was a cloth on a table and

one corner of it had stretched to the floor. The place was packed with that kind of detail. There was not a sign of vandalism. There was an enormous maple in the front yard that had to be older than the house, at least two hundred years old. We envisioned dozens of exciting and unique photographs, days of wonderful work.

The light was gone so we drove back, writing down every turn and landmark and the mileage between. We were enormously excited. How often do you find absolutely unique subject matter?

We didn't wait for the next afternoon; to get in a few hours of photography before the morning class, we drove out to the place before first light. The tree, which had stood for hundreds of years, had, for no reason that I can imagine, chosen that night to fall on the house and barns and smash them flat.

I suppose I've told you about the failures, the ones that got away, to illustrate the difficulties of photography and the sad truth that perseverance and hard work won't guarantee success. But they will surely improve the odds. Georgia O'Keefe said about her art that it required hard work and a lot of nerve. She forgot to mention talent, perhaps because she took her own for granted. You work just as hard when you fail as when you succeed. Perhaps once in a lifetime the average photographer will stumble into a good picture without effort but, without exception, those photographers who have lots of "lucky" pictures in their portfolios are the ones who have paid lots of dues.

Richard Avedon has been in the forefront of fashion photography for many years and his inventiveness, extraordinary skill, and

enormous output are acknowledged. He is, perhaps, the most innovative photographer in his field. A friend who is a successful fashion photographer described the difficulties of that trade: "What dramatically different idea do you have for the third black dress you have to photograph this week?" Avedon's range is extremely broad; from the slickest of Vogue fashion layouts to some of the most insightful and revealing portraits in the history of the medium, he has proven that there is very little he can not do with the camera. His latest project consists of portraits of the working people of the American West. Over a three or four year period, he made seventeen thousand negatives. That's not 472 rolls of film poured through an auto-wind 35mm, that's seventeen thousand 8X10 negatives... Every picture was carefully set up and painstakingly made under tightly controlled conditions. His book, containing a tiny fraction of the output, is controversial, as is everything that isn't bland, but no one of any photographic knowledge can dispute the expertise or the effort that has gone into the work.

Surprisingly, some people who attend workshops bring very few pictures and, while there, show little interest in photographing. But the majority dig in. They often get up at 5:30 to photograph and will probably be out photographing after supper. They work hard, ask staff members for advice, and learn plenty. The good ones know that just as a champion skier has had to fall perhaps 10,000 times before he has a chance of winning anything and a great tennis player has had to hit a million balls into the net, so must a photographer fail and fail -and seriously

study his failures- before he can begin to succeed. Someone (Ansel? Strand?) said that it takes 5,000 negatives and fifteen years to make a photographer. Not either, both.

How do you go out and fail for 5,000 negatives and fifteen years without getting discouraged? Why didn't Atget quit? He had no car, no horse. He carried his clumsy gear all over Paris and the surrounding country year after year, made thousands of the most wonderful images the medium has yet produced, and never had a show or made money or got the slightest recognition until the last days of his life. He had no choice; he photographed because he had to. He loved it enough to bother.

Edward Weston had, in full measure, what I think of as "a rage to photograph." To get some idea of his intensity, you must read the Daybooks. Strand and Stieglitz and Atget and Kertesz and all the other great ones had it too, but Weston wrote about it.

Sometimes it seems that accomplished people figure out what is expected just so that they can do the unexpected. They depart from the norm; they look for the hard way.

If "The cost of progress is trouble" can the opposite be true? Can looking for trouble be a key to progress?

To test the theory, I once decided to try to make a picture that would tell how cold feels. Real cold. Judging by the comparatively few pictures of the subject I have seen, the ordinary way to do it is not at all! Those who have done it seem to have figured out how to do it with ease. They apparently get up at a convenient hour, choose a convenient camera, (a 35mm) and, by the carelessness of the camera position, appear to have taken a shot

through the window of the car.

But if you would 1) consider the project at all, 2) scout out a spot and think out the picture in advance 3) get up at 5:00 a.m. 4) lug an 8x10 through the drifts (no one would expect a quality image under such horrible conditions, so that is exactly why you should make one) 5) take as much time as is necessary to get the composition and the light and the wind-blown snow just right and 6) go back and back again, if necessary until you are really sure that you have made the best picture you can, your picture will, at the very least, be unique.

When I go out to photograph, I'm always hopeful -usually more hopeful than I have any reason to be. I am most hopeful at dawn when I feel I have stolen an hour on all the others and should therefore be rewarded for my virtue and fortitude. Anyway, by following steps one through six, I finally made the kind of picture I had envisioned. Though I got the picture I had hoped for, it means less to me than figuring it out did, or solving the problems, or playing out the scenario. Perhaps in photography, as in fly fishing or chess playing or music making or life, the most important thing is to have participated.

With best wishes for a happy new year,

A handwritten signature in cursive script, appearing to read "Fred Pickens". The ink is dark and the strokes are fluid and connected.

P.S. The dates for this year's workshops are August 7-13 and August 14-20. We'll send a brochure next month. I hope we will meet this year.

ZONE VI Newsletter

Number 54, March, 1988

"...he (Edward Weston) was still (after twenty years) charging the same amount, and rather pleased about it, because it represented the essential democracy of photography: the number of prints obtainable from a negative was theoretically limitless, and therefore many people should be able to share it, at a reasonable price. He disagreed emphatically with the photographers who tried to impose scarcity value natural to painting on the photographer's works."

Edward Weston

Dody Weston Thompson

In Newsletter #31 I mentioned that I was thinking of a new method for the sale of fine prints. The idea was based on the premise that if the photographer could pre-sell a known number of prints from one negative, he would be able to provide them for a fraction of his single print price. I never did anything with the idea until one of the students at a workshop in 1986 organized a group (called "The Gang of VI") to get me started. The easiest way to explain the mechanics might be

to reproduce the "contract." (Lawyers will wince.)

Dear Gang of VIer,

I would like to set up our arrangement with a bit more formality than the hurried conference at the workshop. As they say around here, "good fences make good neighbors."

1. I will send no less than none and no more than three prints in any 12 month period. The first period starts 9/1/86.

2. I will not bill in advance because I don't want to feel pressed or in debt or write bills or keep books or anything. This, (not being paid in advance) is, normally, an invitation to disaster. To the usual hazards such as A) "this isn't the picture I chose; it's sort of like it." B) "the print I saw was darker, lighter, more or less contrasty, browner, less brown, bigger," or all of the above can be added a new unknown; you will be getting prints you didn't choose. You will, therefore, not like all of them equally. They will not be "easy readers." (I have sold all the flashy "easy readers" with which I became infatuated when I first started to collect prints.) I will choose the pictures I send with a great deal of care. I will look for that quality of "otherness" that may not be immediately apparent but, I hope, will develop a richness for you that will not fade as the years go by.

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3. You can't return any print unless it is damaged in shipment.

4. I'll put a return envelope in with each print. Please send a \$110.00 check. The \$10.00 is for packing materials and UPS charges. Make it out to Fred Picker. That's it; I'll do no follow-up, send no reminders. Please do your part.

5. Any time that you want to get off this print(s)-of-the-year treadmill, drop me a line with the check for the print that you decide will be the last.

6. You agree not to sell any print for less than \$300.00 to a gallery or \$500.00 to an individual.

Congratulations on your adventurous spirit. I appreciate your confidence and I am excited that together we may be breaking new ground; this plan has the possibility of becoming a new vehicle in which photographers' finest work gets into the hands of serious collectors at reasonable cost.

So, we're off. Please sign one copy signifying your agreement with the terms outlined above and return it to me in the envelope enclosed.

With best wishes,

To date I have sent out two prints in about twelve months. I can see that I will probably come closer to two than to three a year. There are several reasons; one is that I always think that next month I'll get a more exciting photograph than any I've made this year. (All the pictures I send will be new work; I'm not interested in printing old negatives.) The second reason for only two a year is that I admit to a certain reluctance

to get at the printing; I'd much rather be outdoors with the camera than indoors with the enlarger.

I decided to limit the group to fifty people and that many have signed up.

If you sell prints, try my system. You'll find it gives you a chance to circulate many prints of your best --at least your idea of your best-- work. But realize that you have undertaken a serious responsibility; you are putting yourself directly on the spot. You are saying, "This is my very best."

If you buy prints, encourage someone whose work you admire to set up a "club." Even if he has only one or two members, he will find it worth while because he was printing that negative for himself anyway.

Because I use a simple record-keeping setup for listing printing exposures and refinements, (see NL #31) I can make any number of identical prints just by blindly following my "menu." The first print I sent out had dodging steps of three and five-second durations during the original exposure and nine subsequent burning steps varying from one second (a "tickle") to seven seconds. Without my menu I would not have been able to work out the original formula as precisely, let alone make seventy-five prints without leaving out, duplicating, or mistaking the length of time of a step.

But even with perfect exposure procedures, producing a number of identical prints used to be impossible. Now it's automatic. Paul Horowitz' cold light stabilizer provides an unlimited number of identical print exposures no matter if, why, or how much the light output varies and his compensating developing timer guarantees identical print (and film)

development no matter where the developer temperature wanders.

I never realized the extent of the havoc that even a slight variation in developer temperature can create. To see for yourself, develop a print for two minutes at 68 degrees. Then cool the developer to 64 degrees (a baggy filled with ice will do it quickly) and develop another identically exposed print for two minutes, tear it in half, put one half immediately in the stop bath, but leave the other half in the developer for another minute. You will see that three minutes at 64 degrees are required to match the first print.

Now warm the developer to 72 degrees, (a graduate of hot water placed in the tray will warm the developer quickly.) You will find that you have to pull the second print at one minute and 35 seconds if you want to match the 68 degree two-minute print and the 64 degree three-minute print. Without the compensating developing timer you would overdevelop the print for 25 seconds which would reduce a print value VIII tonality to something between VI and VII. Your snow in sun will look like snow in shade.

The developer doesn't change four degrees between prints, but what happens is that you start off at, say, 68 degrees with a test strip print, then you make a pilot print, perhaps another test strip, if you need more information than you got from the first one, then perhaps another pilot on another paper grade, etc. Time is marching on and the temperature is changing. After an hour or two, you are ready to make the final print. Because your developer temperature has changed, the information you got from the test strips and pilot prints is no longer valid.

What did we do in the pre-Horowitz days? We either pulled the print when we saw our high values take a nose dive (in summer) or shuffled it for an extra minute or two (in winter) until "the high values picked up some tone." Because we were always viewing a partially cleared print under amber liquid by weak yellow safe light, pulling it precisely (when a ten-second error, one way or the other can really mess up delicate high values) required skill and luck in seemingly equal amounts.

Don't stretch your chemicals. Try this: expose a print, tear it in half, develop the first half. Then, after developing twenty-five prints (or however many you would like to test for in the quantity of developer that you are using) develop the second half for the same length of time. (Make sure that, if you don't have a compensating timer, the developer is the same temperature as it was for the first print.) Compare the two halves. I found that developing no more than twenty-five 8x10 prints per gallon of developer is the answer to any possibility of tired developer. Test strips and pilot prints are included in the count. Never start a print without fresh developer in the tray and enough paper in the box to complete the job. (Unless you have another box of paper with the same emulsion number.) When I get to the last dozen sheets of paper of an emulsion batch, I save them for proofs because, even if I want to make only four or five prints, I might use eight or nine sheets just getting the formula.

Photographic emulsions are fermented, like wine, so no two batches are exactly the same. The reasons for differences are many: Each chemical is permitted a certain tolerance for

variance in content, inert matter, etc., just as a machine part has a tolerance such as "plus or minus .005." The coating facility will be a different temperature from last time, (within a certain tolerance) the humidity will be different, the chemist feels better or worse than he did, or he won the sweepstake, or was replaced by the boss' nephew, etc. In addition, the newly opened box was stored longer or shorter than the last box (in the store or in your darkroom) and at a higher or lower temperature, and so on. The upshot is that paper speeds will vary so that a print that you made on a certain emulsion number that required an original exposure of twenty seconds at f/11 for an 8x10, stabilizer set at "C," might now require eighteen or twenty-three seconds and the contrast may also vary slightly. You print according to the paper you are printing on and make adjustments as necessary.

Ansel invented a method of compensating for all exposure and developing variables with a system based on multiplying, by a certain factor, the time it took for "emergence" of the print. I found judging the precise moment of "emergence" very difficult and precision is critical to the method. If you misjudge emergence time by a few seconds the development time, which is a multiple of the emergence time, will change by many seconds. Emergence time will also vary with the dominant print tones of the photograph and your eyesight varies in accordance with the length of time since you have had bright lights on or who knows what else. Anyway, I don't feel secure with it, but it worked for Ansel and it might work for you. It is thoroughly covered in "The Print."

Spotting fifty prints is a chore that is best left to someone else but, lacking a lackey, one method I've found that speeds up the dreary process and improves the result is to start with undiluted Spotone. Dip your brush in the bottle, put a drop on a sheet of glass or a saucer and wipe your brush to a sharp point on the white border of your print or on another sheet of unexposed, but developed and fixed, paper. The black that you are looking at on the sheet will probably match an area in which you have a spot to hide. Work on all the spots that require the tone you created on the print border. Then go to the next print and spot those same areas. Next, dilute the Spotone with distilled water and a little wetting agent, make another mark on your border and spot all the places that match the new lighter dilution. Working on spots in the print that match the tone you got on the print border is easier and more accurate than trying to mix a dilution to match the spot.

If you don't pack a print well, all the effort expended will have been wasted. To find out how not to pack, send a print to a publisher. He will return it in an envelope containing a piece of shirt cardboard just slightly smaller than the print. To save yourself from excess stress, don't open the package; just tear it in half and toss it in the trash.

Here's how to pack a print so well that if UPS mangles it, they will ante up without a murmur. Look in the yellow pages under "Packaging Materials." Order double thickness corrugated board cut so that half of the sheets have the flutes (the tubes in the cardboard) running parallel to the long edge

and the other half of the sheets have the flutes running parallel to the short edge. The size I order, 20" by 22", properly accommodates my usual 14X18 mounts. You will need four sheets of double corrugated per print. Also order a roll of brown wrapping paper and a roll holder with a cutting bar. The paper is 24" wide and a mile long. And tape. I use the brown plastic tape and a dispenser for it. Figure about ten feet of tape per package.

You have to put some clean, smooth material against the face of the mounted print before you wrap it. I use a sheet of archival white bond, the same as used for slip sheets in a portfolio case. You can get it, as well as negative envelopes and print boxes and a lot of other archival materials, from Hollinger Corp, Four Mile Run, Arlington, VA or Light Impressions, in Rochester, NY.

Now tear off a sheet of brown paper from the roll, put a slip sheet on the print face, and wrap the print. (Or you can use plastic sleeves.) Next, lay the wrapped print in the center of a corrugated board and tape it along two opposite sides so that the print can't move to the edge of the package. Don't use the kind of tape you have to wet; you'll wet the print. It is important to write or rubber stamp your name and address on the print wrapper just in case the label gets torn from the outside of the package. Then add another cardboard under, and two over, the print, flutes running the other way and tape the sandwich across the center of each side. Now wrap everything in wrapping paper and tape it. I've sent out hundreds of prints, all packed exactly that way, and even the overseas ones arrive in good shape.

The sharpest lens I ever used is a 12" (300mm) Goertz Red Dot Artar. Artars are described as flat field "process" lenses and are used extensively in the graphic arts field. Process lenses for view cameras as well as 35mm "macro" lenses, are said to be designed for close focusing, but that doesn't keep them from being terrific at infinity. The 55mm Nikkor Macro lens is the favorite of many photographers for 35mm use and large format photographers like Artars. I also have a 19" Artar for 8x10 and it too is excellent to infinity. The Acme shutters that Artars are mounted in are no great shakes and the coating is not as good as that on modern lenses so you have to watch out for flare conditions, but the glass is superb. They don't make Artars any more.

Because we figured it was time to offer a long lens, I asked Bob Schwalberg at Popular Photography to recommend a 12" lens. He knows a lot about lenses. At about the same time, David Brooks of Petersen's PhotoGraphic wrote an article about a little-known lens. They both recommended the same 12" lens; the Schneider "G-Claron." Bob told me that the new model G-Clarons, which, like the Artar, are designated as process lenses, are now apochromats. I accepted that news calmly to avoid sounding like a photographer with less than even a basic knowledge of lens design, and immediately called Paul Horowitz and asked him what an "apochromat" was. (I thought it was an advertising word like "Grandagon" but wasn't sure.) Paul told me that ordinary lenses focus two of the three wave lengths of light on the same plane but apochromat lenses focus all three on the same plane. Sounded good to me. Paul said it was and, not only for

color, but for black and white and for enlarging. Schneider has come out with a 150mm Componon apochromat for enlarging. It costs nearly twice as much as the regular Componon, which is the best enlarging lens I've ever tried, and I was curious about that one also. I called Ron Levin, head man of Schneider, and asked to borrow a 305mm G-Claron and a 150mm Apochromat Componon.

The 305mm is an elegant looking small lens in a great shutter. Copal shutters are the best and the #1 Copal on the G-Claron, when tested on Paul's super shutter tester, went to 1/220 at its highest marked speed of 1/400. That's extraordinary. At usual speeds -one second to 1/125- it was right on the money. The #3 Acme on my Artar can deliver only 1/110 second when set for it's highest marked speed of 1/200th and, in cold weather, a 1/200 setting delivers about 1/60.

Lens testing is easier and more enjoyable than film testing. Sharpness is what you are concerned with so you don't get involved with the subtleties of personal preference as you do with light sensitive materials. Looking at negatives with a magnifier or photographing charts is a lazy way to get wrong information. To be sure of what the lens is doing, test it for what you bought it for. Make pictures.

I made many pairs of identical exposures with the Artar and the G-Claron. I made exposures at f/11, f/22/, and f/45 with each lens for each of a half-dozen subjects. I developed the negatives together and made the equivalent of 24" enlargements of print centers and corners. The two most useful pictures were of distant branches and another of shaded barn boards with sunlit weeds in the foreground. The branch pictures showed distant

sharpness, the nearby weeds showed close-up (five feet) sharpness, and the barn boards showed the separation of close tonal values. The G-Claron print looked just as good on the tree branches. It looked as good on the nearby weeds, too, and separation of close tonal values was slightly better. Though it's hard (for me) to believe, it will do everything the Artar does and then some; it has a better shutter, it will cover an 8x10 with ease, even with movements, and it has better coating. And it costs less than a used Artar.

If you would like to see a G-Claron print, our "Spring Special" print in the workshop brochure was made with one.

The higher-priced Componon enlarging lens made prints that I could not tell from those made with the regular Componon.

We also added the wide angle 90mm f/8 Schneider Super Angulon. (There is an f/5.6 but it costs a lot more and is not as sharp.) No test is needed for this one. The Schneider 90mm is the most-used lens of most architectural photographers. It is equivalent to a 28mm for 35.

The next issue will concern workshops; some thoughts on how to give one, how to pick one, and, either way, how to get the most out of one. I'll also describe a negative filing and locating system that enables you to find any negative you want to print in seconds. And you don't need a computer (though it helps.)

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned at the bottom right of the page, below the typed text "With best wishes,".

ZONE VI Newsletter

Number 55, June, 1988

To teach is to learn twice.

Joseph Joubert
1754-1820

We receive many inquiries about workshops from teachers and directors as well as from students. Because it is useful for students to see the staff side and vice versa, it might be helpful or thought-provoking to relate some of my experiences as both student and teacher. I'll discuss teaching a workshop in this Newsletter and, in the next, address choosing and preparing to attend a workshop as a student.

Naturally, all my thoughts can't work for teachers whose workshops have different goals from mine, but I think that many of my guidelines will be found useful regardless of the director's motivation or personal photographic aims:

Be prepared. For anything. Even after about fifty workshops comprising an enrollment of more than 2,000 students, new surprises surface. Some years ago we had a workshop during which almost no one did any darkroom work, asked any questions, brought any pictures, or seemed to want to photograph. I remember leading a group to a wonderful old hill farm. They didn't get out of their cars. I asked them what the trouble was and they

told me that they couldn't see anything worth photographing. They asked me to take them to a more interesting location. Strange. I never had a workshop like it before, and haven't had another since.

Fortunately, that debilitating experience was followed by another workshop that was just the opposite. The enrollment consisted of a large number of bright, funny, enthusiastic, and interesting people. They did a lot of work, asked a bunch of questions, and generated a lot of energy. And the workshops that followed have all been fun. We get plenty of feisty, opinionated people. That's great. If someone has been alive for more than twenty years and has yet to form any definite opinions, what has he been doing?

Teaching those who really want to learn and are willing to work is exciting, but teaching those who are without enthusiasm wears you out. But regardless of the makeup of the group, it is the job of the director and staff to make every workshop a better educational experience than the last.

What is a workshop for? What should its aims be? What can a good one accomplish? A workshop is for the students. They have come a distance, given up vacation time, spent money, and they deserve as much comfort and enjoyment as you can arrange in addition to a first class learning experience. My overriding goal, my idea of a first class learning experience,

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is to save them time. If we can provide the information in a week that will save the student years of groping through various techniques and approaches on his own, I think we will have served him well. (The real workers are going to get there, with or without you, no matter what, sooner or later. But sooner is better.)

Time. A majority of workshop participants work in other fields and don't have unlimited time to devote to photography. There is a lot of ground to cover and not a moment to waste. Concentrate on sharpening their skills as rapidly and efficiently as possible. When I greet a new group on Sunday evening, I have the nagging feeling that we are already dangerously close to the following Saturday. We're running out of time! We push. During the first evening of a workshop, we teach the whole Zone System and the next morning we are using it in the field.

I have found that a week is the least amount of time that I want to spend in a workshop. It takes that long just to get things really rolling. A weekend workshop may be fine for a specific aspect of photography, such as commercial portraiture, studio lighting for small objects, and so forth, but only useful if the student is completely confident and solidly grounded in technique and theory. Because very few students are, I much prefer to start at the beginning and make sure that all the basics are covered and clearly understood by everyone before moving on. We find that a thorough review of fundamentals does not bother the more advanced students at all because they invariably pick up valuable bits and pieces along the way.

To spend the precious time as efficiently

as possible, it is essential that you have a strong outline of what you are going to cover and when. It must be progressive and logical, and you must stick with it. Thorough preparation and painstaking scheduling require an enormous amount of boring planning. That's not the kind of thing most photographers like to do so most of us are not very good at it. Many have found it easier to "play it by ear" or "let it all hang out" or "stay cool" or whatever this year's phrase for sloppiness is, but I am convinced that more workshops fail because they lack organization than for any other single reason. Schedule every minute. At my workshop, anyone arriving at 9:01 for a 9:00 AM lecture will have missed the first paragraph and a person showing up at 1:01 for a 1:00 field trip will have missed his group. It sounds tough, but why should nine people who can get there on time wait for the one person who can't? Be clear about what you are going to do and when you are going to do it; then write it on the bulletin board, Then do it! If you can't handle that kind of thing flawlessly (I can't) get a professional administrator who can. But forget about getting the best; I've already got Lil Farber!

Accommodations. Partly because of the time squeeze, I don't believe in "hair shirt" workshops. At these artsy-craftsy unstructured "life experiences" the students shop for food, camp out prepare three meals a day, and clean up afterward. There's no time left for photography! I think that those giving a dishwashing, psychology, and hand-holding workshop (and there are a lot of students who love them) should say so for the benefit of those other students who might prefer another kind of experience.

For most participants, a workshop also doubles as a vacation. An available, affordable, well-equipped, secluded and beautiful facility is awfully hard to find, but even if you haven't got one, unexpected niceties like check-in bellboy service, flowers on the tables, wine at dinner, daily maid service, etc. demonstrate that you care about your guests' comfort.

Size. Enrollment for your first workshop will be disappointingly small because a workshop represents a substantial investment of time and money for the student; applicants want to be very sure of what they will get and our records show that the majority of applicants have been referred by alumni. Until you have a lot of enthusiastic alumni, you won't get a lot of applicants... Catch 22. The answer, for me, was to start small and local. I gave courses consisting of four or five weekly evening workshops with assignments to be reviewed each week.

I would rather teach -or attend as a student- a large workshop (50 to 75 people) than a small one. At a large workshop there are more staff members with more insights than just your own. A large student enrollment stimulates the staff and guarantees greater interaction and the exchange of more specialized knowledge among the students. At a large workshop there are more prints to see and discuss. (We show 200 prints of nine staff members and the following day we hang a student show of about the same size.) In a large workshop, the range of ages, occupations, interests and places the students come from add to everyone's experience. Large workshops, therefore, are happier, more interesting, and generate more energy. Part of

the reason may be that staff and students are more apt to find kindred spirits simply because there are more people to choose from.

A large staff can supply the student with a smorgasbord of knowledge, opinion, and method that would not be available from a small staff. I remember Dorr Bothwell at Yosemite with fondness. Dorr is a painter, not a photographer, but she taught me much about the differing emotional impact of various forms, the arrangement of opposing and compatible tonal qualities, negative space, balance, use of shadows as solid forms, oriental approaches, utilization of sight lines, use of tension and emotional contrast and a dozen other valuable aids to composition. She was able to demonstrate and describe the physical and emotional architecture; the base line of a work of art. She proved that a photographer could control the forms he worked with to make them emphasize those qualities that he wants to express. She made clear, specific, and usable what the German writer Novalis said of works of art: "Chaos must shine through the adornment of order."

Staff. To have a great workshop, you must have a great staff. Each member must be excessively enthusiastic about photography. That means they do it. Photography, unlike competitive swimming in which the best coach may be too frail to swim across the pool, requires no strength or athletic ability beyond pushing the button. If a person can't photograph, he can't teach so if a prospective staff member can't show outstanding work, a lot of outstanding work, a lot of recent outstanding work, avoid him. Hiring someone on the strength of past performance or an

impressive resume is like buying a bird dog with a great pedigree and finding later that he can't find birds.

Hire no prima-donnas; your students deserve attention, respect, friendliness, understanding, and good humor. They came to learn, not to feed the ego of some self-appointed "artist." If you hire nice talented people who love the medium and are anxious to share their knowledge and excitement, you won't go wrong.

Perhaps because of Dorr, I choose staff members who work in different ways and often in various media. A description of them might serve to illustrate the diversity I look for and it's also about time that they were introduced!

Susan Barron (19 workshops) is a master of small and large format photography in both color and black and white and is a superb calligrapher, designer and maker of collages. She is also the most knowledgeable of any of us in the fields of art (painting) and photographic history and not too shabby a darkroom worker. She was a friend and protege of Paul Strand and in 1978 she spent four months in his studio printing the last garden negatives. She is fun and funny, but also tough, dedicated, and intense. Hardworking students love her, softworking students don't! In real life, she is Clinical Supervisor of the intensive care unit laboratory at Mt. Sinai Hospital in New York City.

Tim Frazier (19 workshops) is a college professor at the University of Idaho. He photographs in large and small format and in color but he is so adventurous that it is always a delight to see what new things he will bring this year. He is a teacher of rare

patience, great sensitivity and perception.

John Willis, (3 workshops) received his Masters of Fine Arts with honors from the Rhode Island School of Design. He is a Vermonter currently exiled to Massachusetts. John works in all formats and is an outstanding printer in silver, palladium and gravure. He makes serious pictures, extremely funny pictures, and landscapes of rare delicacy. He is about the best portrait photographer I know. I find his work quite similar, and equal in quality, to that of Emmet Gowin. NOTE: Emmet Gowin just called and told us that he is delighted that John will be assisting him at Princeton next fall. THAT should win the small world coincidence competition for 1988!

Clare Brett (6 workshops) photographs in all formats, mostly in color. She also works with infra-red, prints in gravure, and who knows what next? As President of "Aid to Artisans" she travels widely setting up craft guilds in third world countries. On her travels, she uses 35mm. and brings back portraits, street photography, and landscapes, of amazing quality. Clare and I graduated together from Putney School, so every workshop is a mini-reunion.

Bruce Barlow (5 workshops) was an outstanding student several years ago and we asked him to come back and mop up the darkroom, while holding out the possibility of a later upgrade to go-fer. He is finding his photographic way, working hard, and has recently joined Zone VI on a year-round basis which will give me some very appreciated assistance. Bruce is an excellent "go-between;" he still remembers being a student and relates directly to student

concerns. He gives good advice to those who want to get the most out of the experience and, I am told, hosts numerous late hour beer and discussion groups.

Martin Tartar has been with me through 23 workshops! He is the best teacher of us all. He was awarded the Freedom Foundation Award for excellence in university teaching. The jury for that one is comprised of Supreme Court Justices, noted scholars, and various community leaders. Only a handful of teachers have received it. Martin's work has amazing qualities of intensity, airiness and clarity. His prints are superb.

Dave Usher has been been lounging around here for 20 workshops. He is the staff photographer of the Department of the Interior in Washington. His work looks a lot like mine but not as good. Twenty or thirty times a year he blunders across something of (for him) surprising strength. (Actually he's terrific, but I've got to keep his towering ego in check.) Dave knows more about photographic chemicals, processes, emulsions, archival procedures, etc. than anyone I know or ever heard of. He printed all the William Henry Jackson glass plates for the Library of Congress collection.

Lil Farber (24 workshops) photographs mostly people, mostly with a Leica, sometimes with a Hasselblad, and always with great affection, respect, and elegance. Like her personality, her work is original, fascinating, different and absolutely guaranteed to stop you in your tracks. Lil's print collection is rich in old masters and contemporary stars. A visit to her gallery is part of the curriculum and students find the photographs and her accompanying commentary to

be a high point of the week. Photographs are what photography is about. Make very sure that your students see and discuss a great number of outstanding ones while they are with you.

Teaching. It is my opinion that the best teachers are diplomatic guides, not inflexible directors. Pompous, overbearing teachers are tedious. It is helpful to remember that most students do what they do at least as well as you do what you do. (Ever tried neurosurgery?)

We try to make clear the difference between opinion and fact. When I demonstrate print making in my darkroom I make sure that everyone realizes that my method is the best for me but it is not the only way of doing things. Students are encouraged to modify my procedures in accordance with their own technical and aesthetic considerations (or they can keep it simple and do it my way!)

Many students have formed definite ideas about directions for their work. Others are still searching for their way. Encourage their differences, respect their individuality, guide their explorations and, in short, take them the way they want to go. Encourage experimentation and applaud failure. (The only true failure is the failure to try.)

Don't waste meal times. Make sure that there is a staff member at every table. Easy, informal discussions are as valuable as any lecture, demonstration, field trip or any other feature of a workshop (except looking at photographs; nothing is as important as that). Some students are shy and not inclined to get into in-depth discussions in a large group, but they are the very ones most apt to benefit most from the informal atmosphere of a table for eight. Encourage all students to be bothersome; to dig in, to ask questions, to

bother instructors, to learn. That's what they came for.

The Payoff. The cost of progress is trouble and no workshop (or any other complicated human endeavor) always works perfectly. So, though the experience should be of value to all, you can't expect that every student will find the degree of insight that you hope for. But there will always be certain students who will attain levels of expression. They will want you to see their progress and their work will refresh you in the years ahead.

If you think your negative and proof files could use a bit of an overhaul, take heart. I quote from The New York Times, March 13, 1988. "Even so, those who were close to Winogrand -including John Szarkowski, director of photography at New York's Museum of Modern Art- were appalled at (sic) the staggering amount of work he left unfinished when he died of cancer in 1984, at age 56. Stashed away in bureau drawers and plastic garbage bags in his Los Angeles home were more than 2,400 rolls of exposed but undeveloped film, as well as 6,500 rolls of developed film that had not been proofed. Contact sheets of an additional 3,000 rolls of film had been made but showed only a few editing marks. In other words, during the last six years of his life, spent mainly in Los Angeles, Winogrand made more than one third of a million black-and-white exposures and, inexplicably, did not stop to see what he had done." The article goes on to say that Szarkowski was making plans to process the undeveloped film. one third of a million 35mm negatives. If Winogrand had used

an 8x10 camera instead of a 35mm, he would have spent \$750,000.00 on film in six years instead of a mere \$112,000 on the 32,000 rolls. To make your life simpler and spare your heirs this rather nasty job, I have several ideas that have saved me a whole lot more time than I have spent and in the next Newsletter (I promise) I will describe a simple, fast, useful system with which you can find any negative in a minute.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned to the right of the typed name.

ZONE VI Newsletter

Number 56, October, 1988

To walk, to cross a road, to utter a complete sentence, to wear long pants, to tie one's shoes, to add a column of figures -- all these routines that allow the individual unthinking competent performances were attained through an acquisition process whose early stages were negotiated in cold sweat.

Irving Goffman (sociologist)

At the outset, photography is not as difficult to come to grips with as music, sport, or painting. Because there is no need for manual dexterity, a photographically accomplished 80-year-old will invariably outperform a 25-year-old beginner. Physical coordination and conditioning are not necessary to the successful pursuit of photography. Knowledge and desire are what count.

The refinements of photographic (or musical) nuance spring from the experience of the advanced photographer or musician and are largely self taught. The mechanics of photography can, however, be easily taught and, if approached intelligently, much valuable time can be saved. A workshop environment can be the best learning forum for a solid grounding in the fundamentals as well

as an inspirational introduction to the excitement that lies ahead.

In choosing a workshop, pick a teacher whose work interests you. If you are involved with multiple printing techniques, study with Jerry Uelsmann; he is the best. If you aren't sure of the specific direction you wish to take, choose a larger workshop with a variety of staff members; you will have more options.

Thorough preparation for a workshop will enhance the value of the experience. I've not heard of workshops other than mine that assign "homework" to be completed prior to the workshop but I think it's a fine idea. Even if work is not assigned, prepare a portfolio of your best work. Make the best prints you can. Never mind if you think your best work is not worthy of a careful print or a sheet of mount board; you will learn by the effort. Perhaps you will be motivated to go back to the scene or the portrait subject and re-photograph. Any work is better than no work. We get students who arrive empty handed and say, "I haven't done anything for the past year; I was waiting for this workshop." That's awful. We all have 5,000 bad negatives to make; during that year they could have got past 2,000 of them. Nail down your film speed, development time, and proper proof exposure. Bring all negatives and bring the sheet from which you chose your maximum black. Bring a selection of proper proof sheets. Bring film speed test and

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development time test results. Make a set of the eight Zones (see Zone VI Workshop.) A good general rule: If in doubt whether to bring work, bring it. The more material a staff member has to work with, the greater the benefit to you.

If you have done those things that can be done better at home, you will arrive at the workshop ready to advance your skills.

If you work hard, you will impress the staff and you will get a disproportionate amount of attention. I used to teach skiing. Morning classes went from ten to noon. I'd advise the students to use the two hours before the afternoon session to practice what they had been taught during the morning. But it seems that people today want fast answers, packaged knowledge, instant skills, and they think instant skills can be purchased whole. So most of the class members would spend the two hours in the lounge. One wouldn't. He'd grab a quick sandwich and get on with his 5,000 mistakes. Of course he'd get 50% of my attention during the afternoon.

Arrive at the workshop with an inquisitive, non-competitive attitude, determined to enjoy yourself and learn. The odds are that you will be neither the most nor least experienced. If you are either, who cares? Relax. Go prepared to sponge up all the knowledge you can. Understand that there are many ways to do almost anything but if you chose the workshop carefully, don't go against the grain. For now (and for a long time) do it their way.

Steal with your eyes. Watch everything that staff members do; the way they organize their gear, the way they set up a tripod, the way they determine a camera position. If there

is something you wonder about, ask. Don't worry about appearing foolish; half the rest of the students don't know either, but are waiting for someone else to ask! Sit in the front of the room. Communicate. Participate. Be an aggressive learner.

THE SINGLE MOST VALUABLE EXPERIENCE YOU CAN GET AT A WORKSHOP IS THE KNOWLEDGE OF HOW SOMEONE MORE EXPERIENCED THAN YOU WOULD APPROACH THE PICTURE YOU ARE ABOUT TO TAKE. That doesn't mean that his handling will be "better" than yours. But you will see what options are available so that you can decide for yourself how to proceed in order to get said, with conviction, what you want to say. I remember my first workshop as a student at Yosemite. I was set up under a tree which "framed" a distant peak when Ansel wandered over for a look at my groundglass. "Terrible. The dismal black, out-of-focus, wind-blurred leaves would ruin any picture (wrong camera position), the peak is small and insignificant (wrong lens), and the light is from the back (wrong time of day). You'll get a silhouette against a white sky. (Impossible contrast range.) Come back at dawn, when the sun is behind you, stand over here (constructive suggestions)." He led me to a spot from which a lovely spruce could be used to add movement to a stiff composition and advised taking the picture with several filters and making notes so that I would learn their effects. Then he waved his hand in front of the groundglass to indicate burning in of a small area of too-bright stone. He was already making the print! I did as I was told. The picture was lousy (I wasn't, after all, Ansel) but I learned something I have not forgotten. I learned that you are probably in the wrong

spot, at the wrong time, and that both (and many other problems) can be corrected with thought and effort. I learned that an accomplished photographer doesn't settle for the apparent. He can apply controls to his subject matter, even if it's vast. Thought, effort, desire and experience make the difference.

So make sure the staff members look at your work, either on the ground glass, if you are on a field trip or in a Polaroid or contact or work print, if you have been photographing on your own.

You have a unique opportunity to concentrate on photography during a workshop. A supportive environment without office, phones, shopping, TV, children or other distractions contributes to the possibility of swift progress and possible breakthroughs. The more you put into the time, the more you will get out of it. Get up and out early. In a week of photographing, two hours before breakfast and an hour or two before or after dinner, either in the field or working on portraits with another student -or anything-, will give you 20 or 30 hours of concentrated work. Or you could retire to the lounge...

Surprisingly, many people come to a workshop determined to make "fine prints." There is no chance of that when you are sharing a community darkroom with ten other people, using a \$20.00 enlarging lens, sharing a fixing tray and a washer. Nor would I develop what might turn out to be a valuable negative in a foreign darkroom. If you want to review a photograph with a staff member and you don't have Polaroid material, make an extra exposure on a separate sheet or roll of film and bang out a work print. That's what a

workshop darkroom is for. I would not turn down a workshop for lack of student darkroom facilities as long as there is a darkroom where printing can be demonstrated. For many years the Yosemite Workshop had no darkroom facilities and I'm not sure whether it has them now. It doesn't matter; learning to photograph matters and seeing a master make a print is far more valuable than continuing to practice printing on your own.

Spend any scraps of spare time photographing instead of working in the darkroom. You'll learn to make prints by watching a good printer demonstrate. Remember, the physical aspect of printing is nothing; anyone can do it. In printing demonstrations, I work through a print for a group. Together we might work out ten burning and dodging steps, all of which are spelled out on my work sheet. (See Newsletter #31) Then I step back and ask the least experienced printer of the group to follow the recipe and make the final print. He or she will do it every bit as well as I could. Performing the burning steps is easy if you use my three-second burst system and the recipe chart. The hard part is deciding on the tones to print a negative so that the print will express your feelings about the subject as strongly as possible. It is important to realize that there is no "correct" value (shade of gray) for new snow in sun or black water under a dark winter sky. The tones that the photographer should strive for have to do with his impression of the subject, the way he felt about it at the moment of exposure, the emotion he wishes to convey to the "right reader." We owe reality nothing and the truth about our feelings, everything.

Printing expertise takes care of itself; as you photograph more intensely and with stronger purpose, your prints automatically reflect the same intensity.

The most useful learning tool you can bring to any workshop is a Polaroid camera. Any size, any color, any quality. Instant feedback, instant knowledge. With Polaroid you can make a picture for immediate review by staff members and avoid wasting time in the darkroom.

I think you'll find that following these few guidelines will double the value of your workshop experience.

*

I've been threatening to describe my nifty high-tech negative finding system. To review briefly; each sheet film negative and each roll of film has its own consecutive number. The first roll (or sheet) of 1988, for example, is labeled "88-1." Numbers are written on the film edge, which leads us directly to The First Problem. The writing has to be fine because film edges, other than film pack and 120, don't give you much room, and the ink has to be opaque so that the number will show up white on the proof. The only pen that I could find which was fine enough and used opaque ink was the "technical" pen that architects and engineers use. It is infuriating. It clogs up unless you exercise it daily, so each time you want to use it you have to take it apart and wash it. It has a tiny needle that slides (sometimes) through the tube that forms the writing point. The needle usually gets a little bent when you try to clean the pen which requires you to buy a

whole new front. The front costs about \$8.00, and the store is out of stock in the size you want and they can't order less than six, and so on. But, for years, that's all there was.

Recently someone sent me a newly designed pen of this type. It works perfectly without shaking it and cussing at it and you can leave it unused for months and it starts right up. It looks the same as the cloggers I had used but in this model the ink is under pressure and that's what makes the difference. Be very specific when you order or they'll sell you the old clogger. Insist on a "Staedtler Marsmatic 700" and the thickness I use is .30 or "(00)". The ink I use is called "Staedtler Mars-745."

So, I write the year and the next consecutive number on each sheet of film and on each roll of 35mm or roll of 120 (if I used 120). Then I proof four 4x5's, or one 8x10 or a roll of 35 on an 8x10 sheet. Proofs are then three-hole punched and filed consecutively in a large ring binder on the spine of which is written (with a regular felt-tipped pen!) "1988." Pretty casual, but though that's as far as it went, it was still a lot better than a lot of other people's "systems." Right? But about a year ago my system's inadequacy showed up with graphic clarity.

As I was laying out and sequencing prints for a forthcoming gallery show, I thought, "that snowscape with the 'winged foot' shape of black water would be terrific next to this French abstract wall poster photograph because the forms are identical but the tones are reversed; the abstract "foot" is white on black." Together, they would be striking, surprising. Where's the print? Did I ever print it? Where's the negative? To find it, I

have to know its number. To find that, I have to know in which year I made the picture. Even if I know, I'd have to go through the whole proof book for that year. If I don't know the year, I'll have to guess and go through perhaps three or four books to find a proof (and the number) of that negative. How many other pictures are there that would be fine in this sequence that I can't think of? How many good negatives don't exist in prints because I have no list, no way to keep track? And even when I knew of a specific negative that was needed whenever someone ordered a print, I had to search through the books of the years during which I thought I made that picture.

But I HAD to find the winged foot. In the course of searching through book after book, I found other fine negatives for which there were no prints or there once were but the magazine or publisher didn't return them or I sold them or they're at the bottom of another box or some- thing. So I started making notes on scraps of paper like: "don't forget the hazy landscape with the two boats in the Hebrides. Neg. #80-229." Hopeless. SOMETHING HAD TO BE DONE.

I have a small computer at home which is only used to word process and has knowledge of nothing else. First time I heard of word processing I thought it was like food processing; you just tossed in your words, turned it on, and behold: word-puree. Now I can word process and I have learned to "sort." The "software" can also do math and several other things, but I'm just up to "sort." Though duck soup for a computer person, for me to devise a filing system for negatives that is superb and to do it on a computer is something marvelous. With my system I can find

any negative in about a minute and so can you. After I got through, I realized it would also work with a typewriter, but it would be clumsier.

Here's How. Take your earliest proof book in which there might be a negative that you might want to print, either now or ever. If that negative appears in the first two thousand, you are either a great talent, got lucky, or have casual standards. Of the six prints which Ansel told me were the "best workshop prints he had seen in thirty years," only one made my list of pictures I might ever want to print again. Be tough. Only when you find a definite keeper, type under "Negative Number", "75-198". "Negative Number" is my first column. That's all the identification you need. Even if the negative number refers to a roll of 35mm, you'll find the right negative quickly on the proof sheet or in the negative envelope. Then tab over and type under the heading Gross Location, "Scotland." Tab again and type it's Refined Location (if you know it; often I didn't;) "North Uist." Another tab to the next column which is Category. This sounds like a tough one, but it's surprising how few categories you'll have. Mine are architectural, abstract, landscape, portraits, people (groups), monolith (single stone), monoliths (a group), rivers, seascape, grave, graveyard, bicycle. There's only one bicycle but there is no reason to limit the number of major categories. I also have a major category called "skull" in which there is only one picture. The last column is Description. Here's an actual example: Neg # is 84-69, Gross Location is England. Refined Location is London. Category is portrait. Description is

Patricia Neal.

Go right through all your proofs. It's an awful job but I did it in about twelve hours. Have I been good to Kodak over the years! My criteria: Would I want to buy this print if I saw it in a gallery? I came up with about 250 pictures. That's only about ten a year, not a terrific average, but in the first years there were only one or two a year.

Once they are all listed, I can "sort." I can sort any column first and then any other column second, up to four columns. I tried several combinations, like sorting all architecturals together, but I found the most useful arrangement was in this order: The major geographical first, so that all the Maine pictures are together; then the category, so that all Maine architecturals are together; then the local area, so that all (one!) Maine architectural Bucksports are together and, finally, the refined description, "river, bridge, town." Then I printed the list, punched it, and put it in my printing notebook. I can now find any of the listed negatives in a minute because the negatives are stored by the year and by their numbers. Next, I went through all my prints and checked off their numbers on my list. Now I know which prints I don't have and, if I want, I can print them, check them off, and enter the number of prints I made and the date on which I made them. An inventory!

To my surprise, there are very few photographs that fit anything like the same description. "Iceland, Seydisfjordur, graveyard, covers two pictures, but the descriptions sort them out easily: "four graves" is one and "close-up w/flowers" is the other. If any confusion should occur, I can

quickly refer to the proof book of that year and the negative number to find the proper one. That has never been necessary; I can usually find the negative without even referring to all the information. For example, there are pictures where just the place names are sufficient identification; "New Hampshire, Lisbon." Or a place and a description are usually enough; "Easter Island, skull" makes it easy. I only have one picture of Lisbon and one skull from Easter Island.

I didn't attempt to list my river photographs because many of the descriptions would read the same: Under "Vermont, West River, abstract," I'd have dozens described as "black water w/ windblown snow, ice shape." So for the river series, I made duplicate proofs of the best ones and they are in their own box. Although the loose proofs are not as handy as the list, isolating 150 or so proofs in one box beats looking for a negative among a thousand scattered through a dozen proof books.

After setup, maintenance is easy. At the end of this year, all I'll have to do is go through my '88 proof book and enter this year's ten, etc., sort, and print a new list. Like me, you'll probably hate setting this system up, but you'll love having it.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 57, December, 1988

If you wish,
I shall be irreproachably tender:
Not a man, but a cloud in pants!

Cloud in Pants
Vladimir Mayakovsky 1893-1930

For a dozen years Lil Farber and/or I have commented on portfolios that we receive. This is a service for photographers for which we ask a \$100.00 check made out to Greenpeace, The Sierra Club, The Wilderness Society, Friends of the Earth, or any other ecologically oriented non-profit organization. Though the hours we spend can get burdensome, the dollars we help raise for causes we care about strengthen our resolve to continue.

Before investing, some photographers have requested information concerning the form that our commentary takes, its length, and so on. It varies, depending on the pictures. To give you an idea, and an opportunity to perhaps add or substitute your own commentary, I will, with the kind permission of James Ansley of Poughkeepsie, NY, reproduce a recent critique. Please note that it was written as a letter, and the idea of using it in a Newsletter came later, so it is in its original unedited form. Also, apply the necessary latitude; these are not prints, they

are reproductions of prints.

3/31/88

Dear James,

How refreshing! A group of photographs in which I have to search for what's wrong with them rather than what's right! I will try to be critical, but it's mostly nit-picking; you have a fine eye for design, balance, "composition" and use of the space; every object-thing is working hard; good and strong (not tentative). This is especially noteworthy because you are using a tool that is completely "wrong" for this work and a viewfinder that is, frankly, inadequate. Wait 'til you see these forms on a big groundglass; it will look like a TV screen to you! (James had placed an order for a 4x5 camera.)

I have numbered the backs: (We have numbered the photographs. Note: All of James' prints were 5x7 1/2".)

When I first pulled out the prints I had not read your letter and didn't realize they were 35mm. They looked "scratchy." For 35, they might well be the best that can be done. I'll criticize anyway so you can pick up some ideas for future if not for these negs.

1. You have three specific values; the mixed grays of the background, the pale tones of the

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ice, the dark tones of the water. I would try to exploit that difference by making the steps between the tones as even as I could; I would lighten the sunny tones of the woods (dodge; especially in the right corner). This would be my "happy" part of the picture. I would darken (burn) the water. This would be my deeper, more mysterious, even a bit frightening, part of the picture.) There are emotional contrasts as well as tonal and they strengthen the picture. (opinion; not fact!) Also, burn the left edge; see how the snow is chalky along that edge? This is nicely put together, but I would have backed up a bit to include the whole curve of the arching branch at the upper left rather than getting it in contact with the picture edge. It's very eye-attracting up there and pulls away disproportionate to its worth. I would also darken (by spotting) the small "pointer" stick that is two inches from the top left corner. Another big change that you should check is to crop the top strongly to balance the amount of space up there with the dark water at the bottom. A view camera would have shown you this image upside down (turn it over, crop with your hand about 1-1/2" and squint through one eye to see what I mean). The shutter speed is "right" in this one, it looks-feels like moving water.

2. Terrific. The smallest nit is the possibility of backing off a step to include the "V" at the bottom complete (to match the space between the top of the snowy point and the print edge) The "V" formed by the white water and the snow is touching the bottom. Turn the print upside down as before and squint. Adding a bit more to the bottom would also increase the size of the white water in

the lower left; as it is, it's not large enough to see anything, and distracting because it occupies the "hot spot" in the corner. For an upstart, it's making too much noise! Put your finger over it and see what I mean. I would darken it a lot in this print. I think you might improve the print slightly by lightening the shaded snow on the right to strengthen the impression of a single strong form. When you face a choice of sharp foreground or sharp background, get the foreground sharp. (You will not have to face that problem when you get the view camera, you would have merely tilted the back to get both in sharp focus.) Note: I have a strong tendency to complete shapes near the print edge or leave them out. That doesn't mean that's law! What you are getting is opinion. I hope you can pick through it and find some help.

3. Beautifully balanced forms. (Turn the print upside down and take a look.) Print the upper left much darker; it's sneaking out of the print. Let the ice forms be the stars of this one. Your shutter speed is slow if you want a "realistic" appearance (I do; all my water pictures are made at the same speed; I save the abstraction for the forms, not the blur or plastic hardness of the water.) There is ONE "true" speed that is "right" at any distance and for any subject. It's the speed at which your eye sees! To find it, make exposures at 1/2 second up to 1/500, make proofs, take them back to the same place in the river and compare with the impression of movement. You'll see it quickly. Better; take a series of Polaroids and compare them on the spot. You may not want this impression, but you should

at least know the "realistic" speed. Why won't I just tell you? Because you will learn a lot of other things by making this simple test.

4. Very complicated picture which appears simple. You give me small room to criticize! But, I'll try a few nits anyway. Back up 1/2 a step to give breathing room to the small dark form of the scallop that is about two inches from the upper left corner. You are just a smidge away from having cut adrift the wedge-shaped light-toned form to its left. Another possibility (which I prefer, but may not at all be what you were trying to say) would be to crop off the top quite radically down to 1/8" above the "snow pointer" at the left of center. Look at the strength the umbrella-shape of the ice below it gains. The picture becomes more concentrated, more mysterious, the corner at the upper right is improved, the "dark pointer" two inches to the right of the snow pointer then echoes it, strengthening both.

5. Class A. Masterful. You have to have a good reason to make a vertical (the world is really flat, especially small pieces of it) and you had a good reason in this case. What makes it so good? It has equal parts of harmony and conflict; the three forms at the top read upper left to lower right; the three forms at the bottom read lower left to upper right. A war that ends in peace and harmony in spite of opposition and stress. Turn this baby upside down! Now, with the print right side up, darken the lower right corner a touch, lighten the white water above the dark rock and everything above it just a bit (to make the contrast with the dark rock both visually and

emotionally stronger; I'd let the dark rock play the heavy in this drama!) Shutter speed, again, is slow to my taste; water looks furry. These things are easy to correct (if you agree they are to be "corrected.") It is very important, I repeat, that you are careful in reading all of the above. IT IS OPINION; WHAT I WOULD HAVE DONE. And no more than that. Realize also that if everyone did what I would do, all our pictures would look the same. But we are not the same, so that would be "wrong." It gets complicated!

This is very good stuff. The forms are harmonious but in opposition. Like Strand, you set up involved "arguments" of form and content (emotional) and then resolve them so that everything comes out in a quivering tie. (I'm sure this is rather obscure; equally sure that you will get it anyway!)

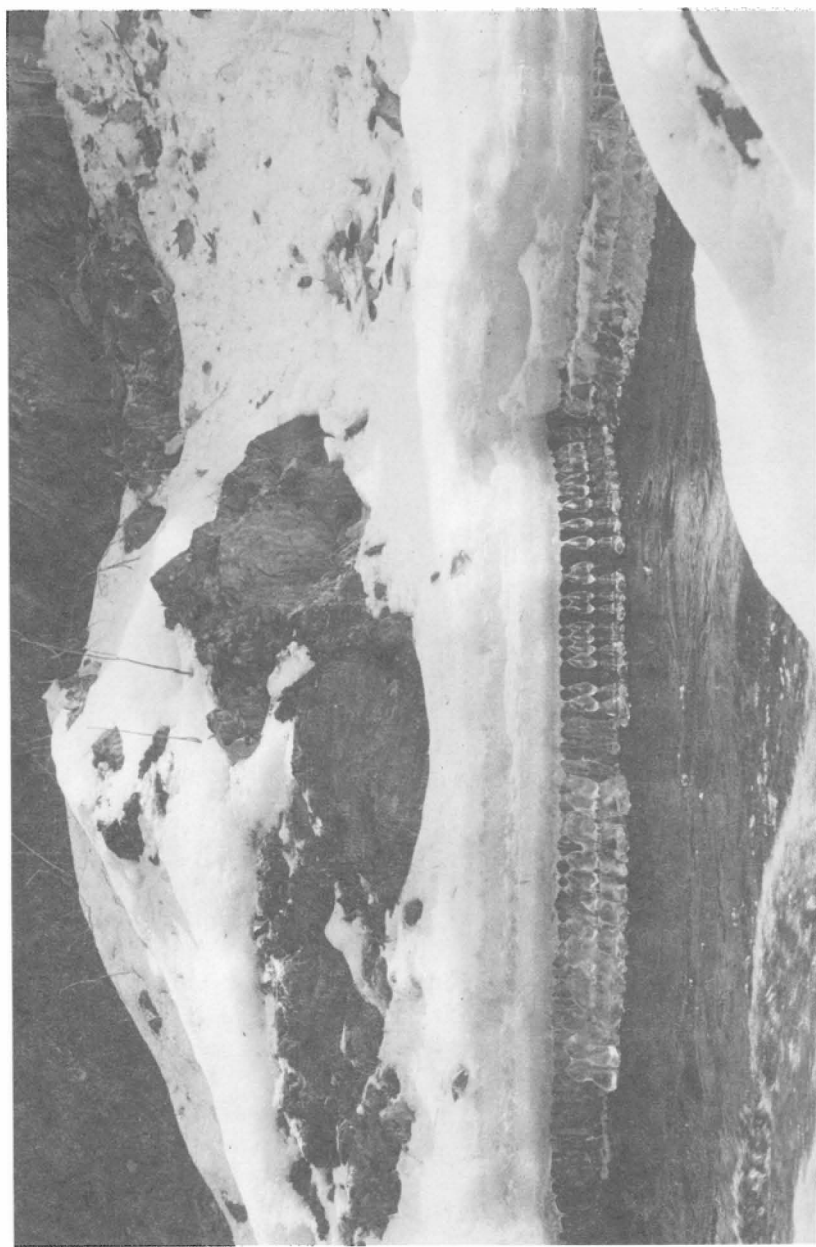
Keep working. Go to a workshop if you can swing it.

With best wishes,

A handwritten signature in black ink, appearing to read 'Fred', written in a cursive, slanted style.

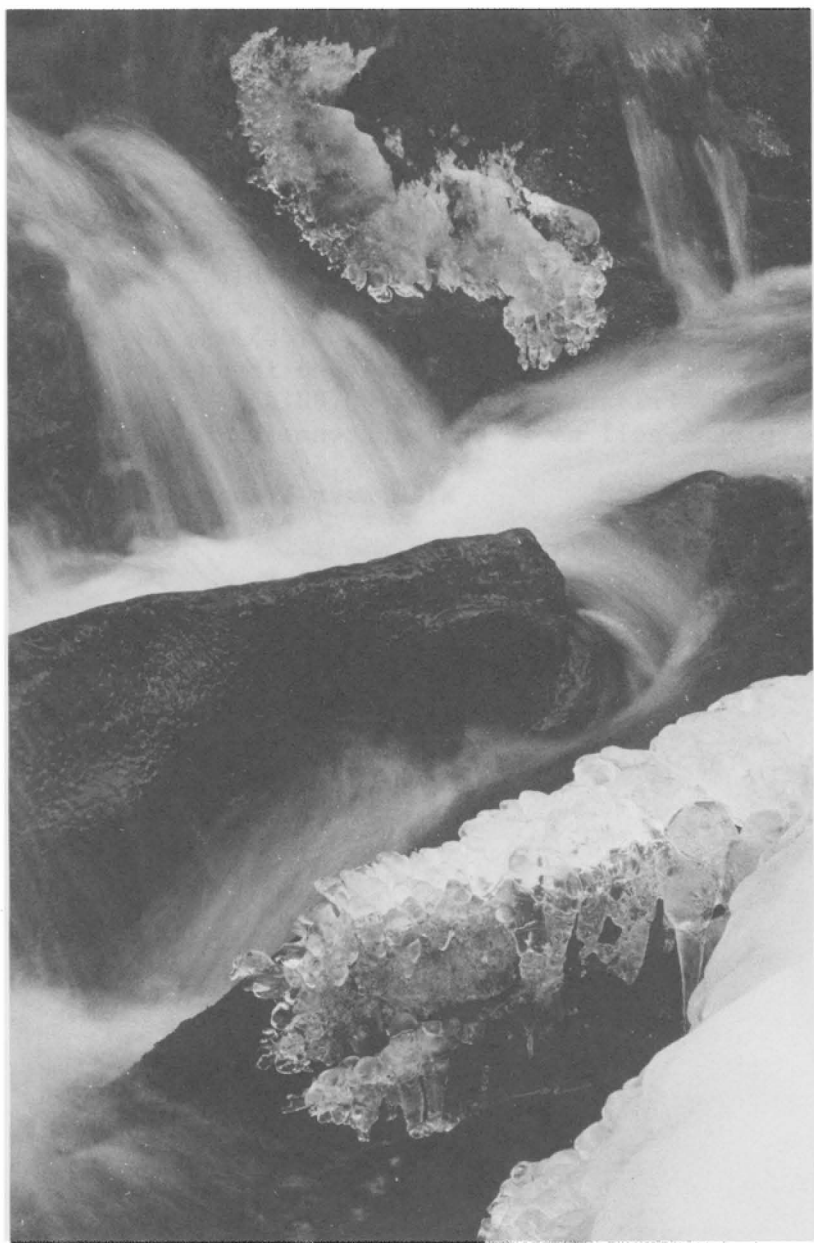
If you would like a critique of your work, send no more than six carefully printed (but unmounted) photographs, 8x10 or smaller, along with a \$100.00 check made out to your favorite non-profit ecologically oriented group. Mail the package to Zone VI Studios, Newfane, Vermont, 05345. We will forward your check and return your prints with our comments.











Note: We will have only one workshop next year. Because it will fill up quickly, we are herewith advising Newsletter subscribers prior to our whole-list mailing. The workshop will be from August 6 to 12 and the cost will be \$985.00. That is for room (double occupancy), board, and lab fees. We'll confirm your reservation and send an application form upon receipt of your non-refundable deposit check (no credit cards, please) made to "Zone VI Workshops" RD 2, Putney, VT 05346, in the amount of \$250.00. The balance is due May 31, 1989. Private rooms are \$90.00 additional; please tell us if you want one.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 58, March 1989

Words could, I believe, be made to do or tell anything. One reason I so deeply care for the camera is that, handled cleanly, it is incapable of recording anything but absolute dry truth.

Let us Now Praise Famous Men
James Agee

Before I began to photograph I collected photographs and books of photographs. The collecting began soon after I happened upon a group show at New York's Museum of Modern Art. Represented were Weston and Strand and Atget, Sudek and Sander and Frederick Evans, Hill and Adamson, Adams, and a dozen other masters. Until that day I thought, like many people, that the camera was best used for the recording of events, but those marvelous photographs were unmistakably works of art and many of them moved me more deeply than the paintings I had come to see.

Why did I find the photographs so stirring? In spite of the greater freedom of the painter to compose, interpret, even create his own subject matter out of thin air, he failed to create (for me) the excitement that I found that day in many of the great works of the master photographers. Was it because the very knowledge of the painters' freedom to

manipulate reality was sufficient to weaken the impact? But though a writer or composer enjoys limitless freedom to invent, the creations of Heller or Vonnegut, Mozart or Haydn, trigger no doubts. Do we relate painting and photography to the visual and, for that reason, expect more "accuracy" than from story-telling or sounds? Please don't misunderstand; I still love paintings but, for me, great photographs convey an emotional power that I find elsewhere only in music.

I tried to discover some universal quality that made the great photographs great. In Edward Weston's My Camera on Point Lobos I found most consistently what I was looking for. Here were quite ordinary forms, shapes, and tonalities, rendered without tricks of photographic process, that generated the most profound feelings. Weston photographed the rhythms of scattered stones as in a Japanese garden, single stones that seemed to possess a life of their own, a bit of kelp writhing against itself, cyprus roots gnarled and bent like souls in torment, tide pools filled with the fearsome darkness of our own imaginings. When an artist transforms familiar forms into emotional metaphors, the viewer's sense of visual reality is suddenly thrown open to question. These pictures opened doors; they gestured to the gropings of the mind.

Weston's powers, to use his very words, lay "in his ability to re-create his subject in terms of its basic reality, and present

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this re-creation in such a form that the spectator feels that he is seeing not just a symbol for the object, but the thing itself revealed for the first time...a heightened sense of reality ...that reveals the vital essence of things...I shall let no chance pass to record interesting abstractions, but I feel definite in my belief that the approach to photography is through realism--and its most difficult approach". I concluded that Weston and the other great photographers had the ability to orchestrate a complex visual composition without compromising the integrity of the subject's essence.

Especially at first, we eagerly snap at everything that interests us or that we suppose, "will make a good picture," but as we continue to photograph, sooner or later we discover some central theme; a subject that can be incorporated as metaphor, a subject that lends itself to the expression of things we most care about.

The Subject Matters

First, the subject must lend itself to the restrictions and attributes of the camera; it must be photogenic. Second, the subject, or the way you perceive or interpret it, should be unique. That's a large order; everything, it seems, has been photographed. But have faith. Your personal vision, sharpened by your involvement in your subject and driven by your need to succeed, can transform the apparently commonplace into the unusual. You can dig deeper.

Third, the subject must be accessible because to get said what he wants to say, the photographer will have to return to it again

and again and make hundreds or thousands of pictures -as Weston did at Point Lobos, as Adams did in Yosemite, as Atget did in Paris.

But most important, the subject has to hold such fascination for the photographer that he will follow it tirelessly. (If he is not addicted to it, he will not stick with it through the always long, usually discouraging, and sometimes painful period required to produce anything worthy of it.)

My fascination with moving water will come as no surprise to readers of these News-letters. For me, no subject matter contains stronger raw material. There is shape and form and mood beyond imagining; stones and shore and shadow and water constantly change according to the height of flow, the hour and the season and the quality of the light. There are a thousand speeds, whirls, riffles, slicks and eddys. Winter adds thin white ice, dark anchor ice, fluffy new snow, snow windblown into sinuous shapes, and grainy melting snow. Nothing is the same as it was last year or before the last storm or even a minute ago. It excites me that no photograph I make on a river has ever been made before or can ever be duplicated. Though the random shapes of even a small section of a freestone (fast running) river are beyond cataloging, the camera defines them with clarity and beauty. Rivers are photogenic.

If this is such marvelous subject matter why has it been largely ignored? My own hero, Paul Strand, spent a whole winter photographing along Vermont's beautiful West River Valley where so many of my pictures have been made but, as far as I know, he never made a picture, there or elsewhere, in which a river or river detail was the major theme. Edward

Weston traveled far on his Guggenheim Fellowship, probably crossing a thousand streams. To my knowledge, he photographed none of them. Ansel Adams had easy access to the many beautiful rivers of Yosemite and traveled extensively through the West, into Alaska and Yellowstone, but made only a few pictures in which, except for several falls and cataracts, the rivers appeared as more than details in a larger landscape. Strange...

I worked hard at every opportunity, but the purest forms of art are indifferent to the energy you expend and my first river photographs failed to convey the excitement I felt. That was not surprising; it's a complicated subject and I had no expectation of immediate success. But after a year and hundreds of negatives, the best of the pictures were still no more than admirable. It was high time to shake the cage.

I was not unmindful of the fact that, though thousands of musicians can play all the notes in the proper sequence of the Chopin Ballades, few can move an audience the way Rubinstein or Horowitz can. There is something that must be present in the man... But before facing up to that very personal, very agonizing problem, I determined to chase down all possible simpler solutions.

I had been using every photographic tool and every imaginative field and darkroom strategy I could bring to bear. I used a variety of lenses, filters, shutter speeds, film development times, used both 4x5 and 8x10 cameras, and photographed under many conditions of light. I had been hoping to stumble across something that might work (and wondering all the while whether the masters, who avoided rivers, knew something about

photographing them that I was in the process of finding out).

Because unorganized experimentation and a variety of procedures and equipment were not working, I decided to radically simplify procedures, gear, and presentation.

To slow down, to clarify composition and to fine tune camera positioning, I made it a rule to use the viewing filter before every single exposure.

How about a single print size? Two Edward Weston prints hang side by side in my living room. One is of shells which were probably five inches high, but are nine inches high in the 8x10 print. The other is a seated nude who was, in that position, probably three feet high. She also appears about nine inches high in the 8x10 print. Both pictures look perfectly sized. Could that be because Weston knew at the time that he could not enlarge, (he had no enlarger for 8x10 negatives); knew that what he saw on the glass was exactly what he would get in terms of print size? Perhaps. In any case, a contact print is an ultimate simplification and I decided to adopt a restriction that was dictated to Weston; no enlargements. But I decided on 4x5 prints rather than 8x10 because I had found that the delicate forms showed to greater advantage in the smaller size.

The quality of contact prints is superb and, because it is far easier to make a fine print by contact than by enlarging, darkroom time would be reduced (leaving more time to photograph.) I'll explain later. (This Newsletter is about contact printing; I'm leading up to it.)

Because of the already small 4x5 print size, I was forced to discard another possible

variable: cropping. The requirement of wall-to-wall compositions imposes a restriction that is really a liberation. For further uniformity, all prints would be mounted 2-1/2" from the top of vertical boards cut 9-1/2" x 12."

You get "reality" at only one shutter speed regardless of what you are photographing or how much of the picture it occupies or how far away it is or what it is or how fast it is going or anything else. I knew what that speed was (see previous Newsletter.) I wanted reality, not "special effects," so I determined to use one shutter speed for all pictures.

Because white water on gray days photographs like library paste and other river values lack separation and vibrancy, I decided to photograph only on sunny days. Besides providing a full range of tones, sunlight adds the shapes of shadows and brightly lit areas to vastly increase the compositional and emotional possibilities of any subject.

Could I simplify camera movements? Because in these pictures the camera is always looking down, why not simply center the lens on the ground glass (no rising or falling front), then "focus on the far." Tilting the back toward me would sharpen the "near," and provide a consistency of desirable spatial "loom" in the foreground. Back tilt was the only movement I would employ.

Because all of the better pictures I had made were horizontal, I made it a rule: horizontals only.

I would use my regular Tri-X film and HC-110 developer but, to keep it simple and avoid technical decisions and note-taking in the field, all negatives would be developed

for the same length of time. In full sun a plus development is seldom indicated and a minus only in backlit situations. I avoid backlight, so normal development would suffice for most negatives. If I were to find a print could be made stronger if printed softer or harder than it appeared on grade 2, I would print it on grade 1 or grade 3. If a negative fell between paper grades, I would use two-tray print development. The simplification I was attempting in the taking process has no place in the printing process. In the darkroom you bring all your inventiveness to bear to intensify the essence of the subject.

For paper, the long scale (.05 base to 2.28 Dmax) and the cool neutrality of selenium toned Brilliant paper were ideal for this graphic subject and I would use no other.

Back to the river. With no mechanical decisions to make I found a freedom that allowed me to concentrate more intensely. I felt a more direct, more intimate, more personal contact with the subject.

After a few weeks I made a picture that contained the qualities I had been trying to capture. It came more than a year after the first attempts but now the knowledge that it could be done, never mind how rarely, gave me the impetus to press on. More "keepers" followed that first one, but it is still a good day when I am able to get even one photograph that contains the special quality.

I find that the most easily defined difference between the few strong pictures and the many also-rans is the quality of penetration. To recreate, no matter how artfully, the physical appearance of the subject is not enough. The strong pictures only appear when my excitement is such that I drive closer (not

physically; emotionally) into the subject until its essence cannot escape.

The rivers do not give themselves up easily. If I do not see precisely, they withhold their magic. A moment in time or an inch of camera position matter greatly. It is always better when a subject gives up its secret hard, when you have to concentrate with painful intensity to carve a serious photograph out of the confusion of possibilities. Success is a string of failed attempts to get it right and intense photography is not a waltz, it is a war. Agee said, "A camera is a weapon; a stealer of images and souls." You are not a bemused observer of the passing scene, you are a predator and, as with most predators, an acute sense of need plays a crucial role in the determination to succeed.

The Contact Print

A contact print is like a proof in only one way; both are made by pressing the negative directly against the paper. The difference is that all proofs are identically exposed (proper proof) on grade 2 paper. (Some 35mm users standardize on grade 3 for proofing and printing and I think that's a good idea. See NL #47.) But the contact print, like any fine print, should fully express the photographer's intention and to do that the print usually requires a precise "custom" exposure plus local controls.

The hinged proofing frames are fine for proofing but don't press the negative tightly enough against the paper for the sharpest result. For serious contact printing you need a contact print frame. Clean the glass on both sides. A single edged razor blade removes

anything stuck on the glass as well as dust, grime, etc. If that doesn't do it, I use ammonia diluted half-and-half with water and Bounty paper towels. They are the most lint-free I have found. Then I use an electric static brush. The same brush is used to clean the negative. For 4x5 negatives, use one half the printing frame (it is hinged near the middle so you can open one side) and lay the negative on the glass, emulsion (dull) side up. Cut a sheet of 8x10 paper in half and lay a 5x8 sheet emulsion side down on the 4x5 negative. Clamp the frame and turn it over.

My enlarger table is marked to position the frame in the center of the enlarger light path. It makes sense to always use the same enlarger head height for contact printing that you use for proper proofing. Set three seconds at f/16 and expose the whole sheet, just like an enlargement. Cover a half inch of the right hand side of the negative with a card (cover an inch for an 8x10 negative) and expose again. Continue to the left. Develop two minutes, stop, fix, etc. Then make a pilot print at the suspected exposure. (See NL #28.) Make additional pilot prints, if indicated, on another grade of paper and/or at other exposures. When you have located the correct exposure and paper grade you will discover that, for some reason that I can not explain but know is true, you are just about done! The print looks quite wonderful and may require only the slightest manipulation. Weston wrote about printing 45 negatives in two days. Even allowing for his exuberance, the thought of enlarging twenty negatives a day is a thought that should not be entertained. But he was a master and he was contact printing. I know it sounds strange that a negative contact-printed

requires less manipulation than an enlargement of the same negative, but to find out, make a fine print by contact and subsequently enlarge the same negative. I found that though I could match the tones and contrast of the contact I could not match its subtle elegance. Even to match the contact prints' tones and contrast required many more manipulations than did the making of the contact fine print. And it isn't because of the size difference; I've "enlarged" (projected) a 4x5 negative to make a 4x5 print and found that even the same-size projected print can not match the contact print. Certainly, sharpness can be expected to suffer when you project an image through another lens, no matter how good it is, but that does not explain the loss of tonal refinement. What does? Do you have an explanation for this phenomenon?

Slight manipulation of a contact print on silver paper can easily be done and is often advantageous. Because you see the negative against the paper rather than a projected image, the brighter the safelight the better. Note: safelights are only comparatively safe and any light will eventually fog paper depending on its intensity and distance. Make tests. (See Zone VI Workshop.)

For burning and dodging contact prints, proceed exactly as you would for enlarging. You might hold light back in the center of the image for three seconds, add light at the upper right corner for five seconds, etc. Before adding the local refinements, I find it helpful to precisely position the card or dodger over the negative exactly where I want it; lay it right on the glass. Then, as I turn on the light for the added exposure, I raise and wiggle the card to avoid a hard line.

Newton rings are sometimes seen in sky or other smooth areas of contact prints. They are caused by moisture between the glass and the negative and the only way that I know to solve the problem is by decreasing the moisture in the darkroom through use of a dehumidifier or air conditioner. We tried several kinds of textured glass, but the texture shows on the prints. If you know of a better cure, we'd be delighted to publish it.

The ultimate ease and beauty of contact printing can be found in the platinum or palladium contact print. (You can't enlarge these emulsions; they are too slow.) Because they require from ten to thirty minutes of arc light or sun light for exposure, dodging is seldom attempted. Or needed. Platinums (palladiums) print straight. Why? If you know, please tell me.

Whether the extreme simplification of taking and printing techniques described above will help to strengthen the work of other photographers, I don't know. It has been helpful to me, in part, no doubt, because I have confidence in it. If you are at a dead end in some phase of your work, as I was, you have nothing to lose; give it a try. I'd be interested to hear whether your experience was similar to mine.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned to the right of the typed name.

ZONE VI Newsletter

Number 59, June, 1989

"There are more horses asses
than horses."

Harold D. Picker

In an article in the April issue of Darkroom Photography, the author criticized the Zone VI Cold Light Head. He said it produced "donuts" in the middle of the print. Long before, I had written him a letter telling him that he was using the wrong lens (a 135mm for 4x5) and sent him a reprint of a page from Ansel Adams' The Print. It specified a 150mm lens for 4x5. He answered by mail admitting his error and telling me, in a burst of sportsmanlike generosity, that he would present me with an opportunity, before publication, to rebut an article he was writing. He didn't.

Two factors common to the amateurs of photography come into play here: the meaningless "testing" of products by failure to isolate the elements, and the subsequent misleading designation of the "culprit" by whim. The real culprit is almost always the incompetence of the tester. Why didn't the author find the lens manufacturer at fault for producing an inferior lens? (It wasn't; it was a perfectly good lens innocently purchased for a purpose for which it was not intended.) He also said the head produced "mottle." Why the head? Why not the paper? Why not the print developer? Then he described his method of print agitation: tray rocking. Even slightly

experienced printers have learned that constant and vigorous agitation is required to avoid "mottle."

These people do harm. They misinform the public; they hurt honest businesses. Photography, probably because you can't keep score, has a plethora of incompetent "experts." In tennis, they would be blown off the court, but even the beginner in photography (in spite of the fact that he has never produced a photograph of value) is permitted to write articles, even books, about subjects of which he knows nothing. These fools will valiantly argue the merits of a film or developer with a Brett Weston or a Richard Avedon. How do you spot these phonies? Their photographs are appalling-horrendous and their grammar is lousy.

These magazines occasionally do produce information of real value. From the June Petersen's, I quote a picture caption in full: "Light can come from any direction--front, side, back, above, below, or (usually) somewhere in between. Here, it's from above and behind, and to camera right. In all cases, the side nearest the light will be lit, and shadows will be cast opposite the light." (Emphasis is mine.)

Now that we are producing an 8x10 camera, we have received lots of questions about

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lenses. Even if you aren't concerned with the 8x10 format, the following may have some value for you in considering lens lengths in general. The equivalent focal lengths (of 8x10 to 4x5) are just double. That is, the subject area covered by an 8" -210 lens- on a 4x5 is the same as a 16" lens on an 8x10. No problem, except one. The 16" lens has a depth of field half that of the 8". Even a 14" lens focused at 10 feet -a distance that might well be chosen for a portrait- has a depth of sharp focus, when stopped down to f/22, between 9'8" and 10'4". Eight inches to play with. Even at f/32, you only get from 9'7" to 10'6" in sharp focus. In a portrait, that should be OK to get the tip of the nose to the ear sharp (you need a little slack to cover the slight movements of a portrait subject) but in open shade, your exposure at f/32 is in the neighborhood of 1/8 second with Tri-X. Subject movement, eye blink, etc. is a possibility. On 8x10, therefore I would use, at most, a 14" (350mm) lens.

Most of us started with 35mm. A requirement for that small negative was to fill the frame. If you are working with an inch of film, that makes sense and the depth of field is sufficient with the longer 35mm lenses. For example, the depth of field of a 105mm lens on a 35mm camera when focused at ten feet and stopped down to f/22 is from about 8 1/2' to 12'. But filling the frame is less necessary with a large negative. There are circumstances where, in order to have sufficient depth of field, you must back up. In general, I would strongly advise starting with a 14" lens. They do many things extremely well. The 14" Schneider G-Claron is a superb lens at a remarkably low price. You may remember that in

a previous Newsletter I wrote about a test of the G-Claron 12" and found it superior to the Red Dot Artar, which is considered a classic. The 14" is even better than the 12"; more covering power and sharper at the edges.

I just re-read the foregoing and thought that depth of field restrictions when out in the field never seemed that bleak. I had gotten the above figures from a Schneider chart, so I went to a Kodak chart. Kodak says that a 14" lens focused at ten feet and stopped down to f/22 will be sharp from 9' to 11'6". That's a big jump from 9'8" to 10'4". And Kodak goes on to say, "This equals about 1/1720 of the focal length and is for very critical definition and when extreme enlargements are to be made from the negatives. For normal work, the depth of field is greater." That's more like it, in my experience.

A view camera can't suffer from back or front focus because the groundglass on which you focus is replaced by the film. The image is transmitted directly, without interfering mirrors or other mechanics. What looks sharp will be sharp.

With hand cameras, it ain't necessarily so. Many small cameras, according to Marty Foerscher of Professional Camera Repair, actually focus in front of or behind the object focused on. This includes even top brand new cameras.

Here's a good (fast, cheap, accurate) way to find out if your 35mm or 120 camera is focusing properly. Set the camera up to photograph a picket fence. Set your tripod

about three feet from the fence and put your hat or a can on a picket about ten feet along the row. Focus on that picket and expose. You only have to test with one lens. Using your longest lens wide open will shorten the depth of field and give you the most visible result. If the picket in front or in back of the one with the hat is sharper in the print, you have a camera problem. Many people have been focusing as precisely as possible for years, but without knowing it, are focusing on the wrong picket.

Limited only by lens quality, all view cameras are capable of making photographs that are as good as the photographer can make. Edward Weston's shaky old 8x10 exhibited more duct tape than bellows, more bare wood than varnish. With it, he produced some of the most marvelous images ever made. The differences between view cameras have to do with sturdiness, design for ease of use, and beauty.

We get lots of questions about weight of gear and back-packing 8x10 cameras into the wilderness. I wouldn't do that. Here's why: If I want to photograph, I don't want to do anything else. Tired after a tough climb, I'd be disinclined to unpack a lot of gear and set up to make a picture. (Ansel had a mule; that's different!) And most of what I find in remote areas is little different from the subject matter I would find near a road. I would, however, carry into a known subject such as Canyon de Chelly, some of the exciting sliprock canyons of the West, or Point Lobos (just a stroll).

The possibilities of making a number of

quality images are greatly improved if you travel efficiently. For example, it is not unusual for me to drive two hundred miles in a day of photographing. That sounds like a lot, but it's only four or five hours of driving in a ten or twelve hour day. (I relate to Emily Dickinson's depiction of the early and late hours as "the far theatricals of day.") Driving two hundred miles and being able to see an average of, say, 100 feet on each side of the road, I can look at -gimme the calculator- 5,280 feet-in-a-mile times 200 miles times 200 feet equals 211 million square feet. Those are pretty good odds. And I'm not whizzing past good stuff, either. I stop and examine anything that exhibits the slightest interest in being photographed. You do whizz past a lot of bad stuff. That's efficient.

Other factors that make photographing near the car more efficient are; you are specifically photographing, not climbing first and photographing as a sideline. Also, there are apt to be more subjects near the roads; architecture, towns, open pasture landscape, farms, rivers -in Vermont, most roads parallel the rivers- and people.

Here's how I carry my camera. I don't fold it up after making a picture. I just put on the lens cap, wrap the focusing cloth around it, and lay it on the car floor. (Anything already on the floor can't fall on the floor.) The focusing cloth keeps the camera from rolling around.

For the next picture, I first examine the subject close-up and, if it still looks good, determine the camera position. I leave the camera in the car. (You can't think with the camera hovering like an impatient heckler.) I put a stick in the ground or mark an X in the

sand or snow or drop my cap where I want the tripod. At that point, the photograph is as good as made.

I set up the tripod next to the car, put the camera on it, fold the focusing cloth on my shoulder for a pad and put the tripod on the cloth. I wear an apron which contains a pencil, exposure record book, film holders, meter, lens brush, and filters.

I go to the stick, set up the camera over it, compose, meter, place the high value on VIII, and take the picture. Done.

The mail and calls contain a lot of questions about papers, speeds of different grades, contrast differences, and variable contrast papers. The way variable contrast papers work is through two emulsion layers. One is high contrast and one is low. The low contrast emulsion layer responds to yellow light, the high contrast layer responds to blue. So the bluer the light (blue filter) the higher the print contrast. Lights vary. An old tungsten bulb is more yellow than a new one and if the power company slacks off a notch, the light will get even yellower. You will have to use a bluer filter as the bulb ages. The gases in cold light tubes also vary in color temperature from batch to batch. It probably doesn't matter; anyone who can stand to use that stuff won't see the difference.

To print on V.C. you have to have an idea of where home plate is located. Here's what to do if you insist on using it. (My neighbor Fred Knapp would say, "It's good enough for who uses it.") Here's how. Get a good paper. Graded. Grade 2. Make a print of a real

picture. Now take a sheet of V.C. and print the same negative. Don't use a filter. See if the V.C. print is the same as or more or less contrasty than the good print. It is to be hoped that at this point your sensitivity to print quality is the minimum required to make you decide you don't want anything more to do with the V.C. But for those who can't tell the difference, let's slog ahead: Now you know whether your light is "normal." If it is necessary to use a #1 or #3 filter to match the contrast of the grade 2 print, than that filter gives you your grade 2. Now that I have told you how to print on garbage, I've earned the right to tell you not to: Don't print it on garbage.

If you are a serious print maker the above was of no interest to you, but the following will be: I will soon be receiving a shipment of coated palladium and platinum paper. This is the rich and glorious long scale material that Weston and Strand and all the greats of a former era delighted in. Long ago I tried to get Boespflug, the makers of Brilliant, to make coated palladium, but the high cost, the problems of manufacture, the probable low volume -it can only be contact printed and it's expensive- made them decide not to attempt it.

I will have a full report in the next Newsletter and if it's good, you can bet we will support it by offering it in our catalog, demonstrating it at workshops, and writing about it. I think it's terrific that in a 47th Street Camera Store World, someone will go out on a limb and make a substantial and chancy investment in a product with limited appeal, just because it's marvelous. I have no idea what the market for palladium paper is, but if

95% of the paper sold is VC and RC (it is) that means that only 5% of the paper-using public have any knowledge of or interest in print quality. So 95% won't buy it. But 95% won't buy Brilliant either and Brilliant does OK. But Brilliant can be enlarged and costs a lot less... We'll see. I can't wait!

I got a mountain of mail in response to the last newsletter. Part of the Newsletter concerned contact printing and referred to the bothersome problem of Newton's rings. I'll pass on the ideas that were actually tested or seem to make the most sense.

Charles Cramer from Santa Clara teaches dye transfer at the Ansel Adams workshops and wrote; "Since I make contact masks and separation negatives, newton rings can be a big problem. However, there are several effective ways to get rid of them. I use Kodak Translite film, which looks like frosted acetate, except it is frosted on both sides. It is only available in 8X10 size, and you must fix it and wash it (unexposed, of course). A sheet of this between the glass and the negative eliminates all newton rings."

I called a supplier and you have to buy it in 25 sheet packs for \$70.00. Who needs 25 sheets? I ordered a pack and it works. Here's the test I used: I contact printed an 8x10 sheet of unexposed, fixed film, exposing for a pale gray. Three big Newton's rings, two small! Then I put a sheet of the stuff between the negative and the glass. Voila; no rings. FINI, as far as I'm concerned. But I've got 24 sheets I don't need. I have fixed and washed it and will mail you an 8x10 sheet for \$8.00

including packing and postage. Because packing, paperwork and mailing costs \$4.50, the offer ends when the 24 sheets are gone.

Charles has more of interest to offer. He describes the use of printers offset powder or Arrid extra dry deodorant in the spray can sprayed thinly on the glass. He says he doesn't know about the archival aspects of these two. I don't like the idea of spray in contact with negatives (a negative is the only irreplaceable item in photography) so I'll use the film. Besides, who wants powder all over the darkroom?

Charles, some more: "Now for projection printing vs. contact printing. There is an interesting phenomenon that dye transfer printers have to adjust for that I have never seen addressed in the general writings. If you carefully make a balanced set of separation negatives, and then contact print these onto dye transfer matrix film, you will get a nicely balanced (color-wise) print. The exposure time for all three matrixes will be the same. Now, take those same separation negatives and enlarge them---and the print color will not be balanced (unless the print consists almost entirely of neutral grays. What happens is due to FLARE. If one of the negatives is much thinner than the others, it needs less exposure time! If the picture is of a person against a yellow backdrop, then the yellow printer negative will be quite thin (to let the yellow through) and will need less exposure time than the other two separation negatives. Again, if you contact print these negatives, you don't have to make this correction. But enlarging seems to cause some kind of flare effect that requires a correction in exposure. And this effect is

much more pronounced with a condenser enlarger." That's interesting: apparently a condenser does more than block the high values through the Callier effect; flare produced by it effects all values. In closing, Charles mentioned "an article for Keeping Pace, the dye transfer Newsletter put out by Bob Pace in which I sing the praises of your Compensating Timer. I have tested it with matrix film and it works!"

George Tice, surely one of the finest printers presently working, wrote to tell me he solved the problem by merely using paper towels on the glass and avoiding any liquid for cleaning. This may also have to do with the moisture (lack of) in his darkroom, but it's a good way to start your experiments.

I also got a good letter (four pages!) from Will Harris of Oxford, CT. that goes into the flare problem in more detail. He writes: "First, (and this is being very picky) it isn't Newton rings, it's Newton's rings." Now I (we) know. "What you see in print making is the patterns formed between two curved surfaces or a curved and a plane surface. Humidity and moisture may aggravate the problem (I thought it was the sole cause) but moisture is not the sole cause of the rings." Will says that the problem is avoided in process cameras by the enormous pressures produced; a half ton over an 8x10 of vacuum pressure. "Now, as to why platinum and palladium prints can be printed straight. This is because they print out, and are therefore self masking... Each tiny area dodges itself by precisely the correct amount to receive full exposure. As to why you cannot match the qualities (or let's say, the properties) of a contact print with a same size projection

print...I can guess, and that is flare in the projection lens. You will lose some sharpness, as you say, even if your projection lens is as theoretically perfect as it can be. That's physics, which is God's business, and it is a waste of time to argue with Him."

Let's cool down with a little photography. Here is a review of an Emmet Gowin show in a recent New Yorker. The writer (unnamed) knows about photography and what he/she says is not restricted to Emmet's beautiful work. "Emmet Gowin's show is a feat. It makes photography appear wondrous--like that moment when you're on a plane and have the window seat and the sun is setting and you look down and see a river and for a minute you stop thinking what you were thinking about. The photographs are like Constable's clouds in reverse--they're aerial views of the earth. Yet they have that same combination of mystery and realism that gives you something to grab on to and that sets your imagination free. They took a lot of work--judging by the perfectionism in the toning and printing--but they appear unfussy, and give the earth all the credit for their beauty."

Summer is here. A joyful time to be out and about. Make a lot of fine photographs. Think about "The Far Theatricals of Day." Think about "giving the earth all the credit."

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 60, October, 1989

"New things are made familiar, and familiar things are made new."

Samuel Johnson, 1709-1784

In the last Newsletter I mentioned that I was about to try a new product with exciting potential. It is called Palladio Paper. It was developed by Rob and Sura Steinberg, The Palladio Company, Inc., P.O.Box 28, Cambridge, MA. 02140. Their phone: (617) 547-8703.

To quote the introduction in the Palladio Instruction Manual: "Palladio Paper is 100% rag paper coated with platinum family metals. It is intended for contact printing only. The sensitizer is a proprietary formula, different from the classical formulas published and patented over the last one hundred and twelve years. The result is a paper with more snap than is usually expected of platinum and palladium paper." They finish with the hopelessness felt by all manufacturers when they pen the pitiful appeal, "Please read these instructions carefully."

Palladio Paper comes in ten sheet 55x6" packages which include ten 2x7" test strips. The cost of the 55x6" package is \$27.50. Also available are ten sheet 9.59.5" packs with twenty test strips at \$75.00, ten sheet 13x16" packs at \$162.50 with twenty test strips, and rolls to 14" wide. The paper is shipped in a hermetically sealed foil plastic laminate bag for extended shelf life. It is available in medium and soft contrast grades. Because I

used a strong, but not excessively exposed or developed negative for my tests, I used the medium contrast grade.

The paper is developed in Palladio Standard Developer. A package to make two liters costs \$15.00. It will develop thirty-six 8x10 sheets before it expires, and it actually improves with age and use. New developer solution can be added to old to replenish that which is absorbed by the paper and carried away.

Also required is a tray of distilled water following the developer tray for a first rinse and then two trays containing Palladio Clearing Bath. A four liter package will take care of both trays and costs \$10.00. It will handle twenty to thirty 9.5"x9.5".5" prints. At that point, you throw out the first bath, substitute the second, and mix a fresh second bath.

Here is how the whole procedure works: First thing is to have a negative that is worth printing (the only hard part of photography). For best results, this negative should not only be an exciting image, it should be exposed two stops more (overexposed) than for silver printing, and it should be developed about twice normal for higher contrast. This density and contrast will be easily contained by the extraordinary tonal range of the material. The well-written manual accompanying the paper gives suggested ISO and

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development times for various films. So what about those fine images that you "properly" exposed and developed to be printed on silver? Can they be printed on Palladio? Yup. In order to make a negative from yours that will have the necessary contrast and density to print well on Palladio Paper or hand-coated platinum/palladium paper, you create a film positive by projecting your negative onto film. Because you use your enlarger, you can also enlarge at the same time. Duplicates of 35mm negatives have been enlarged to 4x5 feet! Let's say you are starting with a 35mm negative. First step is to enlarge it onto a sheet of either 4x5" or 8x10" film. You may burn and dodge as you expose the positive. The procedure is the same as if you were making a print; you burn to darken and dodge to lighten.

After you have the film positive, you make from it a negative. This can be a contact print or, if the new positive will fit into your enlarger, you can enlarge it again. If you want to burn or dodge again, this time it is backwards; you dodge to darken areas of your final print and burn to lighten.

From the Manual: "You'll need a cold light head for your enlarger for best results. A condenser head on your enlarger will work, but won't give the good separation needed at both ends of the negative's scale for Palladio and hand-coated platinum/palladium printing."

To avoid the negative to film positive to negative step, in future I will make two in-camera exposures. One exposure will be two stops "over" and marked for two-times development. I use 8x10" and 4x5" cameras so same-size negatives are what I think I will want, but the possibilities for enlargements, refined contrast control, and local

manipulation of the negative will exist.

I have spoken to Robert about some small additions to his manual. One request is a list of things you need. They include:

a set of four new plastic trays, one size larger than the largest print you intend to make. Because of contamination, you can't use your regular plastic trays, nor can you use stainless steel trays or graduates.

a new one-liter measure. I bought a two cup kitchen measuring graduate in the hardware store.

two gallons of distilled water.

a bottle of 3% hydrogen peroxide from the drug store. Don't get the hair bleach; it is too strong.

rubber gloves. Surgeons gloves or non-surgical gloves from the drug store or painters rubber gloves from a paint store.

a mask used to be used while mixing chemicals. Hardware stores and paint stores have them.

I admit to impatience and excitement when approaching a product of this elegance. During the years I have photographed, materials have deteriorated; everything has gotten poorer. Here are people who want to do something better. I haven't the slightest doubt that the energy, expertise, and what must have been a very heavy investment, could have been utilized in a far more convenient and

profitable way. But the Steinbergs are dedicated. The last folks I can remember who really wanted to make a difference in this medium were The East Street Gallery and that was twenty years ago.

I perused my proofs to find a nice overexposed overdeveloped negative. The best (worst) I could come up with was on the very edge for silver printing. Just the way I like them. (See Maximum Printable Density -MPD- in Newsletter #51.) The negative received a plus one and a half development and was of a long scale scene to begin with. The high values showed the slightest trace of tone on the proper proof.

You can expose the print by sunlight, in shade, by Aristo's Platinum Printer, NuArc's 24-1 K, or any other source of ultra violet and blue light, such as a sun-lamp, a carbon arc light, or a metal halide light source. The sun-lamp, though cheap and possibly a good way to try this method of print-making, is slow. Compared to a four to eight minute exposure using Palladio's light source, you would need a forty-five minute exposure.

Robert sent me one of his own light sources. It is the Palladio 11x14" 15 watt Exposure Unit, which sells for \$394.00. They also have a 25 watt unit at \$525.00. They are now working on a 16x20" 20 watt Light Source/Vacuum Frame combination which will be available by early winter. It will cost about \$1,500.

The Standard Unit consists of a row of fluorescent tubes in a box with the necessary transformer and fan. A well-built, neat package, as impressive as everything else they sent. I connected it to the "enlarger" plug of an old Gralab wall timer, put the negative in

my contact frame in the usual way (emulsion to emulsion, the negative in contact with the glass) and set the timer to three minutes.

I set the print frame face down on the printer and hit the switch. It's OK to have the room lights on, but not fluorescents. They will fog the paper (they are what you print with). To be absolutely safe, I just used my Super Safelight. Yellow light is OK, blue isn't. While waiting three minutes, I put on the mask and gloves and mixed the developer with distilled water for the first tray. I used my new glass two-cup measuring cup. Then I mixed the clearing bath with distilled water which I divided between the third and fourth trays. The second tray (rinse) got what was left of the distilled water.

The light went off after three minutes and I took an old mount board and slid it under the frame, covering about an inch of the negative. I exposed for Rob's suggested times of four minutes, then moved the board an inch and gave it 1.5 times as much. He suggests; 4, 5.5, 8.5, 12, and 18 minutes.

I took the paper out of the contact frame and could see a pale image before development. As directed (I read the instructions!) I slid the test strip smoothly into the developer, face up, and left it without agitation for four minutes. The image came up immediately and didn't seem to pick up much more density after a few seconds, but the instructions state that maximum black requires four minutes. Maximum black also requires, in the Palladio Standard (15 watt) Exposure Unit, at least 7 minutes of exposure. The developer should be at least 75 degrees but can go as high as 100 degrees, which is said to give finer grain. Floating the developer tray in a

bigger tray of hot water is the way to get the temperature up. (I couldn't see any grain either way.)

After four minutes in the developer I transferred the print to the second tray (distilled water) for a two minute rinse with agitation. You are directed to handle the print by the borders and lift it to drain, then re-submerge, then lift again, etc. Then you transfer it to the first clearing bath and agitate for one minute and then once every minute for four minutes. Then into the second clearing bath and repeat. For test strips, you don't have to bother with the second clearing bath. Just rinse off in regular water after the first clearing bath for a minute and view the test strip.

I didn't see anything useful... The black border at one end as well as that end of the image was considerably darker than at the other end, so I know it got a lot more exposure. But I was unable to see any lines of sharp demarcation between the exposures. Just a darkening blend. Think, Fred... The mount board? I had used it to make test strips for silver prints and it worked fine, but this light was strong and the exposure was long. It might shine through the board. To check, I used a piece of masonite for my second try and still no good. Perhaps the very diffuse light leaks around the edge of the board or even transmits through the glass sideways. Whatever. The way I solved it was to mark off the printing frame in exact one-inch increments and then measure the print. If there is leakage across the strips, the results will not be accurate, but they will be close enough for starters.

My exposure looked like six minutes. Not

enough for maximum black, but I expected that because the negative was not tailored properly for the Palladio Paper. I exposed for six minutes and produced a very flat print. Rob's directions indicate that a 1% (10 ml. per liter of developer solution) addition of 3% hydrogen peroxide will increase contrast by one paper grade. The developer pack makes two liters, which I had in my tray, so I added 20 ml. (Twice as much -40 ml.- would have given me two grades.)

Then I exposed again and found that the peroxide works as a restrainer, so more exposure is required. Back to the test strip. I found I needed 8 minutes of exposure now. Sort of. I had to work out the dry-down which is substantial. It looks like about a 10% factor to me. I also heated up the developer to, theoretically, reduce grain and that produced more density. It will take a bit of doing to work out the various factors and get everything down to a system, but there isn't anything difficult or mysterious operating.

Well, there you are. A very beautiful print in spite of not using an ideal negative and in spite of no previous experience with these materials. The print shows an amazing range of tonal values; you can see deep into any part of it. But there is more to it than that. The image is changed emotionally; it's a different experience than the silver print from the same negative. The subject is changed. It is more mysterious, rather ethereal. Do you see more in this medium than you did in life? Perhaps the impression of "otherness" results from a combination of factors; the beautiful soft texture of the paper itself (Strand talked about "paperiness" and serious printmakers know what he meant) or

the warm tone or the strong impression of three-dimensional space. Comparing it to my silver print is an amazing experience. It's so different it could almost be another image. Emotionally, it is.

This is a big thing. This will take some time to sort out. This will change your photography; change the way you actually see your subject. You will previsualize to the printing medium.

There seem to be no problems technically; actually that part is pretty simple. As discussed in the last Newsletter, contact prints sort themselves out quite easily and seldom require any fancy burning or dodging. Contact prints, on silver, are not only the high point of printing elegance, I feel they pack more emotional wallop than any enlargement. And platinum/palladium is an extension of that excellence. It can provide an even more sensitive look at the medium. Is it for you? That requires a lot of thought. Is it right for all images? At this early point, I suspect that there are certain images that will usually benefit. Portraits, for sure. What's the "opposite" of a portrait? Ice? I think I like the clarity and coldness of a silver-rich paper better for that. Soft landscapes? Ever seen a Strand or Weston-printed landscape in platinum? Magnificent.

But each photographer will have to feel his way to find out if this marvelous material is for him. It is decidedly not for the casual snaphooter or the guy who happily prints on garbage papers to save a few cents or a few minutes. This is for serious, dedicated WORKERS. If you are one, the cost in materials and time is irrelevant. Get a starter kit and

go to work. As always, that simple, direct, under-utilized procedure will sort out all the questions and all the answers. At the very least, you'll have some breathtaking prints.

My compliments to the Steinbergs. They have done a monumental job and have produced an extraordinary material. Weston had the pleasure of printing in platinum/palladio without the bother (and unevenness) of mixing chemicals and coating paper. Now we can too, and I'll bet this material is better than anything he had the chance to work with.

The continuity of the product will ultimately depend on the support of photographers. Only we can assure its financial health, its future. That's how it is. I think that The Palladio Company will be better served if Zone VI does not handle their paper. The reason is that we would have to buy it for less than the retail price to cover our costs. I think the Steinbergs will sell just as many boxes as we could if we recommend it and they will sell them at the full price. More important than that we, or any other supplier, makes a profit on the fruit of their labors is that they should stay in business. I would therefore urge you to buy direct from them rather than from a store. Rob and Sura are both enormously knowledgeable (Rob is currently teaching a workshop) and they are cordial, and helpful, and there! Call (617) 547-8703.

Contrast control is possible in a lot of ways. An obvious way to accomplish more or less contrast in the print than was inherent in the subject is to increase or decrease

negative development time. If that does not produce the desired result, a change in paper grade is the logical next step. I have no argument with grades 1,2, and 3, but I think that negatives that require a grade 4 are usually so poor in original seeing or technical know-how (underexposed and/or underdeveloped) that grade 4 has infrequent use except for graphic stylizations. Next step: straight (undiluted) print developer to increase contrast or diluted or two-bath developer to decrease contrast.

There are several less used, or known, ways to increase or decrease contrast. They have the advantage of achieving the desired result without messing with the film's affinity for normal exposure and normal development.

A change in light is one way; if a scene is terribly harsh (woods with sun-dappled leaves is always tough) come back early or late or on a gray day or something in between. Or make a double exposure. One exposure when a cloud passes over and a second (underexpose; place the sunlit leaf on about Zone V) to gently record the high values. Believe it or not, each leaf will return to the exact position it held before a gust of wind disturbed it. Strand, photographing plants, often made a half dozen short exposures. He'd wait for the wind to die for each one.

I discovered an interesting way to get any amount of contrast out of a low contrast subject by exposure(s). Suppose you had a black telephone to photograph in black and white (I did) against a medium gray (or equivalent) field. Suppose you metered the phone and placed it on Zone zero. (The background falls on Zone II.) You make an

exposure. The film has recorded nothing of the phone because you placed it below the threshold. The background has a Zone II density. Expose again; phone nothing, background III. Etc. After a lot of exposures, you'll have the background up to VI and, if that's what you want, you then make a final exposure placing the phone on II or III or any place you want. The last exposure will have a negligible effect on the background as it represents only a tiny percentage of the total the background received. Note: after the second background exposure you will not gain a Zone for each exposure. You will have to keep doubling, and then some. Then some, because of the intermittency effect. I did it with Polaroid the first time to see about what I would need.

Why not get the background of a tone that would create the desired contrast with the phone? Perversity, and the desire to see if it would work. And sometimes you can't change the background; I have used the same system to photograph things such as very dark stones on quite dark sand.

An overlooked way to increase contrast is to make long exposures. Minutes. You can get long exposures by dimming your lights or stopping down your lens, or using filters; either neutral density or contrast filters. Then develop the negative normally and print on grade 2 paper. I find I get a much finer result than by increasing negative development and/or using grade 4 paper. Give it a try.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 61, December, 1989

"I say --subject matter is immaterial-- the approach to the subject, the way it is seen and recorded, is the critical test of a worker.

The Daybooks of Edward Weston

My friend and workshop staffer, Tim Frazier, sent me a wonderful essay entitled, "The Thing Itself" by Bill Jay. It appeared in "Shots" and also in the Daytona Beach Community College Newsletter. I was fascinated by the similarities and differences to my own ideas recently described in a recent Newsletter concerning my brook series. I got in touch with Mr. Jay at the School of Art, Arizona State University in Tempe. He kindly agreed (in a very funny letter) to allow his essay to be reprinted.

I asked Bill for a resume so that I could introduce him properly. He sent eighteen pages! He has published eleven books including, Photographers Photographed, a selection of his personal portraits in monograph form. There are four completed books awaiting publication and two more under way. He has published more than three hundred articles and essays in magazines and journals. He has so far photographed more than six hundred photographers. The portraits have been displayed in galleries and placed in many collections such as those of The International Museum of Photography, the Bibliotheque Nationale, and the San Francisco Museum of Modern Art. He has been awarded numerous grants, run workshops,

and judged on grant committees. His name appears in Who's Who in America and Who's Who in American Art. His present work includes the supervision of a new degree program at Arizona State: Photographic Studies. "This BA degree will combine studio photography and art history in a unique program designed to train future historians, critics and curators of the field of photography."

THE THING ITSELF

The Fundamental Principal of Photography
by Bill Jay

For nearly thirty years I have been deeply involved with the medium of photography; for most of that time I have directed my lectures and writings at young(er) photographers.

Hopefully my own attitude to the medium will continue to evolve; certainly, it has undergone continuous change. In looking back at the last three decades, however, I have been aware that one fundamental attitude has remained at the core of all my experiences in the medium. It is this "frame of reference" which I would like to share with you in a single article.

I am not claiming that this principle of photography is radical, different or new. On the contrary. I believe that it is familiar and basic -- which means that it deserves and demands constant repetition, in an age when

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principles are often impugned, as if they no longer held relevance.

But like all fixed rules, it must also be accompanied by flexible strategies, which accounts for individual images of insight and brilliance which, seemingly, ignore the principle which we will discuss. But it is there, and no less crucial for being hidden, like the foundations of a building.

Perhaps the most obvious, and therefore the most contentious, issue of photography is the medium's inseparable relationship to The Thing Itself. Photography performs one function supremely well: it shows what something or somebody looked like, under a particular set of conditions at a particular moment in time. This specificity has been, and remains, photography's boon as well as its bane. It was not by chance that photography was born in the early 19th century when a deterministic spirit was fueling the Victorian's fanaticism for facts. The camera, along with the microscope and the telescope, became one of the primary instruments for investigating the details of reality. Deeply and strongly rooted in subject matter, the medium has had an uneasy and tenuous alliance with authorship since its introduction. Therefore, what a photograph depicts has generally taken precedence over what a photograph means.

The advantage inherent in this notion is that photography has become an increasingly useful tool in our society for the transmission of information about every conceivable aspect of life.

The "disadvantage" is that while a photograph is directing attention to its subject, it is de-emphasizing the role of the

individual who made it. Indeed, in the vast majority of photographs, even those of extraordinary impact in our lives, we have no knowledge of, or interest in, the author. Attempting to make individualized (artistic) photographs in this environment is a bit like discussing metaphysics at a football stadium during the Super Bowl. This does not mean that the attempt is without value; it may indeed influence your neighbor. But it does mean that the chances of being recognized by the public at large are less than likely.

The act of photography is a similarly private act, unlikely to be rewarded or even noticed by society in general. The young photographer must come to terms with this fact. A photographer with artistic aspirations has a very small audience -- one which is increasingly congregating within the faculty at colleges and universities. These institutions have replaced the church and the princes as the major patrons of the arts in our society. Indeed, about the only way it is possible to earn a healthy living from being a photographic artist is to become an academic. And this is the primary value in attending graduate school -- to earn the qualifications necessary to become employed as a college teacher/art photographer. In this role, the artist has the freedom to expand his/her creative potential.

I have mentioned the arts in academia in order to throw an oblique light onto a previous assertion. It is this: most of the Great Names used in academia, for the inspiration and edification of students, would not be eligible for graduate studies, let alone as faculty members. Most of them were professional photographers, earning their living on

assignment in journalism, industry, fashion, medicine, and a host of other photographic applications. My point is that great (even artistic) photography is not a function of environment or a prerogative of academia.

A corollary of this point is that you cannot be a photographer by aspiring to be one, or by learning everything there is to be known about photography. Photographers produce photographs. And many of them. Like every other skill, photography is learned by continuous and dedicated practice.

One well-known photographer came to stay at my home and shocked the local photo dealer by ordering 1,000 cassettes of 35mm film. I assure you that every frame had been exposed within one year. That equals in average 100 frames per day, seven days a week. Another photographer friend shoots a roll of film every day "even when not photographing" because, he says, "it is essential to keep the eye in training." It is true that these two examples are of particular types of photographers but nonetheless the principle remains: you do not become good at anything unless you do it earnestly, regularly and, yes, professionally.

The truth inexorably leads to a single, but usually ignored, matter of fact: in order to photograph with any degree of continuous passion, you must have a fascination for the subject, otherwise you cannot sustain an interest in the act of creation for a long enough period of time in which to make any insightful or original statement about it. In spite of its seemingly heretical slant (in this day and age) what you photograph is usually more important than how you photograph it.

The photographer is, first and foremost, a selector of subjects. The photographer makes a conscious choice from the myriad of possible subjects in the world and states: I find this interesting, significant, beautiful or of value. The photographer walks through life pointing at people and subjects; the aimed camera shouts "look at that!" The photographer produces pictures in order that his or her interest in a subject can be communicated to others. Each time a viewer looks at a print, the photographer is saying "I found this subject to be more interesting or significant than thousands of other subjects I could have captured; I want you to appreciate it, too."

This immediate emotional or intellectual response to the subject matter is at the core of photography. Its periphery is the photographer's manipulation of framing, focus, exposure, lighting, and all other variables, in order that a bland record is invested with depth through the production of an intriguing image.

I have stressed the importance of subject matter because it is the fundamental principle of photography -- and, paradoxically, the least discussed area of the medium, especially to young photographers. I can understand this reluctance. We all have grandiose aspirations for, and expectations from, photography and this leads to a plethora of concepts; theories, aesthetics and critical theorisms which, when heaped on the back of photography, bring the medium to its knees, not in homage but in defeat. The fact of the matter is that photography cannot bear the intellectual weight with which it is fashionable to burden it. Photography is not an intellectual game but an emotional response to charged living.

After a critical essay of mine appeared in print, Ralph Steiner would often write me a funny, provocative and stimulating letter. But he would end with the words: "but you still have not told me in which direction to point the camera -- and this is what matters." And he is right.

However, giving specific advice on what to photograph would not be appreciated even if it was possible. The answer is provided by a question: What are you really interested in? In other words: What is it that can sustain your enthusiasm for a long time? I advise young photographers to be overly pragmatic in answering such questions. First, list all those subjects which fascinate you -- without regard to photography: i.e. what would you be doing if there was no such thing as a camera. After this list is made, you then start cutting it down. Eliminate those subjects which are not particularly visual. For example, existential philosophy can be deleted. Then cut out those subjects which are impractical, for one reason or another. For example, I have always been fascinated by Patagonia but, as I live in Arizona, it is not a subject which I can shoot at available hours and weekends. The subject must not only be practical but also accessible. Also eliminate those subjects about which you are ignorant, at least until you have conducted a good deal of research into the issue. For example, you are not making any statement about urban poverty by wandering back streets and grabbing shots of derelicts in doorways. That's exploitation not exploration.

Continue similar reductions in your list of interests until two or three subjects remain, all of which: a.) fire your enthusi-

asm, b.) lend themselves to images, as opposed to words, c.) are continuously accessible.

Let me give you an example. As a teacher I encounter a great number of photographic students who are active in college life, naturally emotional about many aspects of education, and who spend the greater part of their waking life on campus. But in the past 15 years, and over 1,000 students later, I have never seen a photographic project based on what it is like to be a college student. In fact, it is rare indeed to see a photographic student carrying a camera.

Instead, they select subjects which they assume their professors (or the art community at large) expect from a photographer and wonder why they cannot sustain any interest in making pictures. Photography has become a grade-producing chore and the thrill of visually confronting the world has lost its sharp edge of discovery, the original reason, perhaps, why the student became a photographer.

But back to the list ... with some hesitancy, I admit, I would recommend one further elimination process. It is this. When you have two or three visually possible and accessible subjects, all of which interest you equally, it is no compromise to select the subject which others are more interested in viewing. The state of being human dictates that some things are visually more interesting than others.

As a lecturer, I am well aware that it is difficult to transmit information to a disinterested, bored audience. You must engage and hold the audience's attention before the content can flow. It is the same with images. Just be aware that some subjects are more accessible and interesting to the lay person

than others -- and it is deliberately perverse to ignore this consideration. There is a very fine line between pandering to popular appeal and a respectful consideration of viewer's interests, and only the integrity of the photographer will hold the balance.

All this talk about emphasizing subject matter might indicate that I am only advocating a strict, straight recording of objects. But this is not so. I have been talking about starting points. I do believe that the narrower and more clearly defined the subject matter, the more scope there is for a continuing evolution of complexity and, hence, the greater the latitude for personal interpretation. An analogy might help to explain my point.

I have recently relandscaped my front yard and now need to plant trees. I could have an "instant" tree by collecting an assortment of trunks, branches, twigs and leaves and assembling the parts. But the tree would be dead. The starting point for a living, growing tree is a seed or a sapling. Then by careful nurturing, and a good deal of patience, a tree will grow -- often into a form which could not have been foreseen.

It is the same with a body of work, of any merit, in photography. The greatest scale for deep-rooted, organic growth begins with the most simple premise.

The alternative is a frantic grasping for instant gratification which merely leads to works displaying visual pyrotechnics but of dubious depth and resonance. This is the fallacy of form. Young photographers are often pressured into an emphasis on individual style, a search for distinction, a quest for newness and differentness. Yet the truth of

the matter is that a unique style is a by-product of visual exploration, not its goal. Personal vision only comes from not aiming for it. In dim light, objects emerge from the gloom when not looking at them. It is the same with style; paradoxically, it is a natural, inevitable result of emphasizing subject, not self.

And this principle brings up an equally important correlation between subject and self. If it is perceived to be important that the self should be ultimately revealed, the question arises: What is the nature of this "self?" If the self is shallow, narrow and inconsequential, so will be the resultant photographs. It seems an extraordinary presumption that every photographer has a depth of character which demands revelation!

Inevitably, most photographers would do the world a favor by diminishing, not augmenting, the role of self and, as much as possible, emphasizing subject alone. This is not meant to be facetious. Such photographers would be members of an august group -- the majority of photographers throughout the medium's history, most of whom remain unknown as personalities. However, the emphasis today is on a cult of personality and individualism, and I presume that the majority of young photographers who encounter these words are anxious to assert self. Like all noble aims, however, it is not achieved without varying degrees of responsibility and hard work. The young photographer must develop a photographic conscience.

What I mean by this term is this: if the subject of the photograph is the vehicle for profounder issues, then it is the photographer's responsibility to think and feel

more deeply about those issues. That sounds self-evident. But how is it achieved? By engaging on a quest for self knowledge which invests the act of living with greater energy and commitment. I am well aware that this sounds very nebulous. You cannot wake up one morning and assert: today I will be aware and more alive. It starts like self-expression, with a concentration of focus -- on the subject matter. It presumes that the subject deserves not only looking, but also thinking, reading, writing, talking as well as photographing -- earnestly and energetically.

I once watched a television interview with a great violinist. The interviewer asked him to describe a typical day. The musician said he read scores over breakfast, then composed music in the afternoon, played in a concert in the evening, met with musician friends to play together, then went to bed dreaming of the violin. The interviewer was aghast -- it seemed such a narrow life. "Yes," said the violinist, "initially my life was becoming narrower and narrower in focus. But then something extraordinary happened. It is as though my music passed through the tiny hole in an hour glass and it has since become broader and broader. Now my music is making connections with every aspect of life."

In this sense photographers are photographers one hundred percent of the time, even when washing dishes. The ultimate aim is an oscillation between self and subject with the image being a physical manifestation of this super-charged interface between the spirit and the world.

It demands reiteration: this conscience of the photographer is not learned, not appropriated, not discovered, not acquired quickly

or without effort. It is a function of the photographer's life. And it begins with an intense examination of The Thing Itself.

If this presumes too much, I make no apologies. The young photographer, unwilling to develop such a conscience, can always move on to some other activity, without failure or shame, or join the army of hobbyists who derive great pleasure from their images, or employ the medium in its honorable role of documentation without artistic presumption.

My concern is with those who engage in artistic posturing and shallow assumptions, using photography as if it was a clever trick and employing stylistic devices in a sleight of hand which deceives the eye.

An earnest and honest appreciation of subject matter is the genesis of a clearer, deeper vision. Photography is rooted in The Thing Itself.

Many thanks, Bill. My best wishes to you, and to all with whom you shared your thoughts, for a Merry Christmas and a Happy and Healthy New Year.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI Newsletter

Number 62, March, 1990

"All good books are alike in that they are truer than if they really happened and after you are finished reading one you will feel that all of it happened to you and afterwards it belongs to you: the good and the bad, the ecstasy, the remorse and sorrow, the people and the places and how the weather was. If you can get so that you can give that to people, then you are a writer."

Old Newsman Writes
(Esquire, Dec. 1934)
Ernest Hemingway

My photography books are as highly valued as my recordings of music. The pictures, and sometimes the writings, of the photographers have taught me much.

Many of the very finest books are out of print. Isn't it strange that the Paul Strand books: La France de Profil, Ghana, Living Egypt, The Years 1915-1946, The Years 1950-1968, Sixty Years, Time in New England, all are out of print except Paul Strand, Photographs. And most of the books by Weston, Atget, Soudek, Stieglitz, and 100 others, are gone. But the work of new photographers, not in the class of these masters is being published. Why?

My guess is because new books provide movement (employment) for the publishing people.

A new book starts a chain of activity; boss publishers take photographers out to lunch, editors sharpen their blue pencils, production people confer, lawyers write contracts and haggle with other lawyers, assistants research, secretaries type, and accountants bill. Designers design and art directors create. There are story conferences, sequence conferences, committees to appoint. And there are meetings; breakfast meetings, lunch meetings, dinner meetings, snack meetings and even meetings between meals. There are phone calls beyond counting and now there is Fax to play with, too. There are assignments to hand out, bids to get in. But to reprint a book requires only a purchase order mailed -sorry, faxed- to the printer. Not much excitement, "creativity", or gainful employment in that.

But once in a while a new book comes along that is unquestionably outstanding and deserves to be published. When you see it you hope it will enjoy more than the traditional single print run before it disappears. Such a book is Land.

It isn't brand new, it was published in 1985. The photographer is Fay Godwin, an English woman of skill and perception. The publisher is Little, Brown.

Quite often the written additions to a collection of photographs are annoying. Not so here. There is a fine introduction by Ian Jeffrey and a perceptive essay by the novelist

John Fowles, author of The Collector, The French Lieutenant's Woman, etc.

The pictures are powerful. Godwin photographs no pretty fence rows or English gardens; there is nothing even vaguely "picturesque." She photographs a wildness of land and sky and insinuates a strong feeling of presence in pictures of the ancient stone circles and graveyards. The contrast, often in the same picture, of untamed and man-made landscape, is sensitively but firmly handled. Nothing escapes her and she lets nothing escape you. There is no hint of the pretentious, heavy-handed explorations of the obvious so apparent in many "socially conscious" modern photographs.

Most photographers would choose as their "prefacer" someone professing an unquestioning love for the medium as a whole and for his or her work in particular. Not here. Although John Fowles says, "Those who see words as always superfluous before image had better turn quickly to the mercifully wordless eloquence of her photographs," he actually has much of interest (and criticism) of photography to say:

"I have first of all to confess to a considerable dislike of photography as everyman practices it. I detest the sight of bands of tourists armed with cameras, and snapping everything into nonexistence... I sometimes feel an almost metaphysical horror before photographs, that they freeze time so, snatch their fractions of a second from it and then set them up as the ultimate reality of the thing photographed... The trouble with the precise image, which we so often covet, or lament the absence of, is that it destroys all but one transient, time-fixed aspect of

reality, whether it be of a face, a place, or an event. It no more gives the whole truth of a marriage, say, than a formal wedding photograph."

He continues: "I used to enjoy photographing flowers, in particular; now I prefer to remember them in a much vaguer way, and yet, perhaps strangely, what seems a more present one, compared to what I might feel if I had a photograph before me. The photograph dates; makes past, inalienably now dead. (This is why I dislike my piranha-fish tourist photographers, because they so often photograph in order not to look; as if having recorded for the future that they were there is more important than the being there.)"

I agree with the problem Fowles has with the "frozen" images. If you have read these Newsletters for a while, you have noted my constant striving for a spirit of what I call "otherness" that a photograph must possess if it is to enthrall me. It must be an open-ended document; it must contain an invitation to the viewer to go a-wandering. If it's merely a record of having been somewhere, no matter how skillful the composition, no matter how pretty the print, it is (to me) a so-what picture. Photographers need to track feelings to their source, but not necessarily to reveal them.

The second idea that Fowles explores is his theory that the piranha-fish photographers substitute photographing for seeing. I agree. A graphic experience having to do with that common phenomenon took place in Africa. Like the other people in the group, I started off photographing "subjects." Lions under trees, elephant families in tall grass, exotic birds and herds of plains animals. I squinted at Africa through the viewfinder. For two days,

for two thirty-six exposure rolls. Then I woke up. There are about eight million Lions-Resting-Under-Tree pictures in the world and 15 million Elephant-Family-Group pictures and who needs another of either? I put down the camera, took up the field glasses and, for two weeks, never made another exposure. That I saw Africa, in even this short time, more intimately than those whose days were largely spent in lens-changing, film-changing, and aperture-changing, I have no doubt. And my memories, freed from the strict descriptiveness of photographs, are free to roam, to embellish, to romanticise.

I am not suggesting there is always a loss of vision or of enriching personal experience through the performance of photography but I do agree with Fowles that when the camera is used for the purpose of recording only, the viewer may be losing something.

But in another aspect of photography, the opposite is true. When an involved photographer goes forth to work in a personal way; to shape specific subject matter to his own inner rhythms, he responds more sensitively than he would if he were not carrying his camera.

What is the difference here? At the risk of oversimplifying for the sake of clarity, I think important work happens only when a point of view on the part of the photographer exists. When the desire is to merely record, the results are not profound. That does not mean that pictures of events cannot be valuable. News pictures, sports pictures, etc. may be fascinating but by their nature they are subject oriented, not personal, and the point of view (if any) on the part of the

photographer is incidental. I have made many commercial pictures of professional football, show horses, yacht racing, architecture, industry, "weddings, children, and pets," etc. but none of these pictures have much to do with the photographer. They are outwardly oriented and therefore of interest primarily to those who have an interest in the subjects.

"I once shared the illusion that anyone can take a good photograph. No one thinks to become a good writer by buying a typewriter, or a composer by acquiring a piano... We will go to a doctor if we are ill; but no one believes there is a disease called poor taste. If I took this photograph, bought this coat, painted my house this color, it must be all right. I took it, I bought it, I chose it.

"It might seem from many of Fay's photographs here that she is unfairly accompanied by great good luck in terms of light and cloud and the rest; but I know that in truth many of them required many days of waiting, sometimes return visits from London, sometimes a long prior sequence of failures. She told me only very recently of a visit to Hawaii, and that she thought she might have taken one good photograph there. The last trick the amateur learns is when to photograph. I once asked another famous photographer what he found the most difficult part of photography to learn - lenses, filters, the darkroom side? 'Simple,' he replied. 'When not to press the button.'

I received a beautiful new book from my friend John Sexton. It is entitled Quiet Light and may be obtained from your bookstore or direct from Little Brown. Send \$50.00 plus \$1.50 shipping to Bulfinch Press/Little Brown, 200 West Street, Waltham, MA 02254.

John's imagery is very much his own vision but, to my eyes, has a certain relationship with the strongest (most specific) aspects of Ansel Adams' work. (John was Ansel's assistant for many years.) His pictures provide a fascinating contrast to the perhaps deceptively less precise imagery of Fay Godwin. John finds a different "reality" -some might call it "escapism". Seldom does he allow a hint of man's presence to intrude in his frame. Many of his pictures might have been made before man arrived on Earth. Most of Godwin's pictures, however, show the presence and the affect of man on the landscape. Are Godwin's pictures therefore more "realistic"? Depends on whom you ask. If you ask me, I'd say that the "real" world is the natural one, the one unaltered by man. If you agree, you will find John's "escapism" is to reality. In addition to John's elegant images, his book is among the most beautifully designed and printed books I've seen. In any event, both books are outstanding and I recommend them to you.

We received lots of nice comments on the printing video we introduced in September. Some wanted to know about the music. It is the alemande from the Bach Suite #3 (for solo cello). There is a wonderful Yo-Yo Ma C.D. containing all the cello suites.

Petersen's named the video, "One of the ten best." That seems to suggest a "Son of Printing with." At present, our plan is that the next video will be about making pictures in the field.

Although we tried to answer most

questions in the printing video, there have been some requests for more information regarding the choice of contrast grades. Let me give it another try: I always make two pilot prints. One is on the paper grade I think will be the correct one and the other is on the paper grade I think might be the correct one. The second print is on an adjacent paper grade because an enlargement sometimes does not produce the same effect as the proof. Reference to the proper proof will give you a clue as to whether you want to try, say, grade 2 as the primary grade and either grade 1 or grade 3 as the secondary grade. After making test strips, both pilot prints are exposed so that the high values match. (Forget the low values for now.) Select the print with the proper atmosphere. Don't worry about contrast; by local manipulation (burning and dodging) the contrast of either grade can be altered.

To illustrate: Assume a simple landscape of sunlit pasture in the foreground, a shadowed cliff in the distance, and a clear sky with clouds. In the field, I'd place the clouds on VIII and take the picture. That gives me a negative of Maximum Printable Density and assures that 1. the clouds are not blocked and 2. the shadowed cliff is as far up on the films' straight line as it can be. It's the best negative you can make. Let's say the pilot print on grade 2 has the atmosphere we tried to capture in the field but the print could use more contrast -darker low values. (The grade 3, though it has the "proper" contrast, has the wrong atmosphere.) With the grade 2 you can easily match, or even exceed, the overall contrast of the grade 3 and still retain the atmosphere.

Here's how: Let's assume the enlarging exposure for the desired cloud density (tone, print value) was 24 seconds. To increase the contrast you can't lighten the clouds because they are, in this example, already of print value VIII.

To increase the print contrast, all you have to do (all you can do) is darken the low value, the cliff. You do that by folding your bracket prints into place as shown in the video, substituting progressively darker cliffs one after the other until you get it right. The selection is easy when you have all the visual information at hand. If the bracket prints indicate that the cliff wants nine seconds more (thirty-three seconds total), you merely add nine seconds to the cliff area. The additional nine seconds might make the cliff as dark as it was in the grade 3 pilot print or even darker.

Because the cliff is a band across the middle, it is harder to burn than the sky or the grassy foreground would be. You have to shield both the sky and foreground values and it is difficult to do both, with precision, at the same time. You could cut a long rectangle out of a big card and use that hole to burn in the cliff, but I can't do that with much accuracy; I have a problem watching the top and bottom of the cliff at the same time, wiggling the card to avoid a hard line, and staying right on the line. I'd do it this way:

With the enlarger set for three second bursts, I'd use the "cover card" as shown in the video to precisely position my burning card. Then I'd dodge the foreground (bottom) for the first three exposures (nine seconds) counting out loud, "three, six, nine." Then I'd place the cover card and then dodge the

sky (top) for the next nine seconds continuing the count; "twelve, fifteen, eighteen" and then remove the card and add three second exposures up to 33 seconds. The foreground and the sky got the desired 24 seconds, the cliff got 33. Using the cover card technique, and having to concentrate on only one line at a time with your burning card, precise control is easy.

If you wanted a more brilliant foreground (refer to the bracket prints) to contrast more strongly with the cliff, you would merely dodge the foreground for four or more three-second bursts and then proceed as above. Count each burst out loud so that the total comes up to thirty-three seconds.

Use a similar technique to darken an area around something. Imagine an evergreen or a building sticking into the sky. If you burn the whole sky including the tree, the top of the tree will be darker than the bottom; a dead giveaway.

Let's say you decide on 21 seconds for the whole print and 24 seconds for the sky. On the first burst, I'd dodge the part of the tree that projects into the sky for three seconds. (Use the cover cards and dodging cards as shown in the video.) Then give six more bursts to the whole print; 21 seconds (except the top of the tree.) Now, burn the sky and tree top three seconds. You have given the sky 24 seconds and the tree top 21 seconds.

There is another area that might need further explanation. I mentioned an exercise to make you more aware of print tonalities. You will find this a wonderful way to increase your sensitivity to gradation.

Take twenty-five sheets of grade 2 8x10 paper -GOOD paper- and cut them in half and

then again. You will have 100 4x5 sheets of paper. Make a test strip print from palest gray to black.

Let's assume that palest gray appeared at two seconds, black at 10 seconds. That's your exposure range. Develop one sheet that has not been exposed. That's your maximum white. Develop one sheet that has been exposed for ten seconds or more. That's your maximum black. Now make 48 more prints that fit between the black one and the white one and get them evenly spaced!

If you can do it using less than 100 sheets, you are very good. You will not only learn more than you can imagine, you will have the satisfaction of knowing you are one in about a thousand who will bother to do it.

I tried a new camera. I thought it would be nice to have a small, splashproof, cheap, light, flat camera to take with me on a recent fishing trip to Mexico. It's an Olympus Infinity Quartsdate. Here's what it does, automatically: it underexposes light (snow) scenes. It overexposes flash at less than ten feet and underexposes flash at more.

"Point and shoot?" No. Point, wait 'til it focuses, and shoot. Infuriating. Also, it writes the date in dayglow orange ON THE PRINT! What's it good for? An object lesson; never buy a camera you can't give back.

I'm down to a Nikon F, a Leica M-2 and Zone VI 4x5 and 8x10 cameras. No medium format. The brick-shape is cumbersome to hand-hold and, without an eye-level viewfinder, they take pictures from belly height. They weigh as much as a 4x5 and cost a

pocketful. B&H quotes, "Hasselblad 553 ELX w/80 F2.8 CF & A12....\$3,387.00." Want to add a 250 F5.6? No problem. It's just \$3,218.00. For less than \$7,000.00 you have a camera and two lenses...

For hand-held, nothing beats 35mm. 2 1/4 formats usually end up on a tripod. I'd go right to 4x5, get the print quality possible from 20 square inches of negative and better lenses, (see Arthur Kramers description of the amazing new APO Symmar 210 in the March Popular Photography). You'll have no mirrors, no meters, no motors to break, controls at hand to correct perspective and increase depth of field. And you'll have some change left over for film!

They say, "If it ain't broke, don't fix it." We say, "If it ain't broke, fix it anyway." (If you think it ain't broke, you're not looking hard enough.) Everything can be made better and we are constantly looking for ways to improve our products. We recently sent a letter and a padded container to those who purchased an 8x10 camera. The reason is for a retro-fit; a bail to open the back for easy insertion of the film holder. But we sold more cameras than we had on our list... So if we didn't reach you, let us know. We will send you a container and your postage cost.

So far nearly a thousand camera owners have volunteered to demonstrate or discuss their cameras. Let us know if you would like to see our camera and we will give you the name of someone in your area.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed name.

ZONE VI

N e w s | e t t e r

July, 1990

Number 63

"I want the stark beauty that a lens can so exactly render...."

Edward Weston

Modern lenses can deliver more beauty than Weston's ever could. If today's photographers can't utilize their superiority to create the magic that he found, we can't blame the lenses! There is a new lens available from Schneider in the useful 120mm length for 4x5. The Apo-Symmar is as sharp as the Super-Angulon, but it does not have the covering power. It has a 72 degree angle of coverage while the Super-Angulon covers 100 degrees. It will cover the negative if you displaced the lens (with camera movements such as rising front) no more than 1/2". The Super-Angulon, however, covers at a 3" displacement. But note; at the limits of displacement, things aren't as nice as you might like. In other words, you would get a better overall result with the Super-Angulon displaced 1/2" than you would with the Symmar displaced 1/2". The S.A. is coasting, the Apo is straining. Is the S.A. always superior? No. The Apo is sharper for close work; less than 5 times the image size. If small displacements and close work are normal for you, the Apo will do just fine. But I would use a 210 for such work so prefer the Super-Angulon. The possibility of losing even

one picture that I might have gotten if I had just a bit more coverage makes it worth the extra cost.

Coverage gives you creative options. For example, if you were photographing monoliths at Easter Island, standing stones at Calanish, or tall structures of any kind, you would want your camera back to be vertical to prevent convergence of the vertical forms. If you were unable to raise the lens far enough to include the figures and still cover the negative when close to them, you would have to either point the camera up (not so good) or back off to a spot where less rising front would include the figures. Backing off might be an unacceptable alternative; there would be a deterioration in print quality because the desired image would be smaller on the negative. And, perhaps more important, backing off changes the feeling of the image; it is difficult to establish presence if you're not present! Covering power gives you creative options. I want all I can get.

The 120 Apo-Symmar (72 degree coverage) sells -from Zone VI- for \$462.00 as opposed to \$925.00 for the 120 Super-Angulon (100 degree coverage). You pays yer money and you takes yer cherche.

There is a very definite trade-off in lens design between sharpness and contrast. The Japanese designers have chosen high contrast. Perhaps they feel that the illusion of sharpness is enhanced by higher contrast.

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That's true. Print a negative on grade 2 and grade 3 paper; the higher contrast print will appear sharper. (It isn't; same negative.)

In the old days, lenses famous for sharpness sometimes weren't. I had a classic lens; a 14 1/2" Kodak Commercial Ektar. This was a studio standard for 8x10 for many years and they are still in demand. These old lenses were designed before computers and their wonders were what Marty Forscher called, "the result of emotional testing." I could not get the image quality I wanted from this lens; there was a "hardness" and when I reduced development time for negatives made with it, the low values, which are always poorly separated, entered the area of mud. I sent it to Marty to check out and he said that's the way they are. I sold it the way it was. (Speaking of camera repair experts, another once told me his wife would not let him name their daughter "Hasseldorff" even though he figured that what he earned repairing those two cameras would send her through college.)

So, anyway.... I don't care for the quality of the Japanese lenses. They are not as sharp and they give a "hardness" to the image. Though their contrast can be reduced by shortening negative development, that doesn't cure the airlessness or the lack of feeling of substance and presence. And shortened development time always reduces low value separation. I want the opposite; a rich, fat, fully exposed, fully developed negative. (Maximum Printable Density.) That's the reason I "place the high value on VIII and take the picture." This places the low values as far up on the film's straight line as possible which gives me all the low value separation possible.

I find that there is a "sweetness" to prints from Schneider lenses that is readily apparent. Ansel Adams told me in 1965 to buy a 210mm Symmar and a 121mm-Super Angulon. The many improvements over the years make them more than ever the best pair of 4x5 lenses I know of.

I've been told that the reason for Schneider excellence is the glass itself. Schott, their supplier, is reputed to make the finest optical glass in the world. Maybe so. Though other lenses might match the bench test results of Schneiders, artists like Adams knew that there is far more to it than that.

I was delighted to receive a copy of a new magazine called PhotoPro. The pictures are good! Ever notice that most of the "How-To" articles in magazines are written by people who illustrate, by their fourth-rate pictures, that they haven't the slightest idea "How To"... photograph! The first issue of Photo Pro was so much better than the other magazines that there is almost no comparison. Bob Shell of Shutterbug, and Michael Chiusano are mainly responsible. I hope they can keep it up. PhotoPro is not only for pros. It contains a lot of good general photographic information. To subscribe, write PhotoPro, 5211 South Washington Avenue, Titusville, FL 32780.

A few odds and ends: Though our lens modification kit will not work with 50mm enlarging lenses on the 4x5 Beseler, we find

it will work with a 50mm on the Beseler 23C.

With our Compensating Developing Timer, I often change the developer temperature to lengthen or shorten the development time. For example, if I have twenty 4x5 negatives or eight 8x10's, both of which I consider the maximum I can handle, I will use the developer at a starting temperature below 68 degrees (62 or 64). This will lengthen the "real time" and give me more time for agitation. I also use cold developer if I am developing prints in batches of a dozen. Conversely, if I only have a few sheets I raise the temperature above 68 degrees to speed things up.

If you are using a film developer with a recommended developing temperature of, say, 75 degrees, to find your developing time, start up a regular timer and our timer with the probe in the tray (or water bath tray in the case of roll film) and develop for the manufacturer's recommended time using the regular timer. When you have reached the manufacturer's recommended time, immediately check the time showing on the compensating timer. Write down the time. It will be much longer than the real time. Now, proceed with your test using the compensating timer alone. Increase or decrease its first time until you find your developing time.

A number of recent calls and letters indicate an increasing interest in densitometers. A good one costs a lot of money. My MacBeth cost several thousand dollars. Though a densitometer is necessary for printing shops and professional photo finishers, I would not recommend the purchase of one for a working photographer. Here's why: All you can do with it is 1. determine your film speed and 2. draw curves for different

developers or negative development times.

The curves are not useful in real work because they don't give you the information you need (the proper development time) to make prints. Here's why: suppose you think that the right density is 1.30 for Zone VIII. If it's right for contact printing on dead paper, it will be wrong for enlarging with a condenser, using a Japanese lens, on lively paper. What is the right Zone VIII negative density? The one that puts a print value of VIII on your paper using your enlarger for the time for minimum exposure that will produce black through the film edge. Period. A densitometer has no way of knowing what your density (or your developing time) should be. For finding film speed, however, you do need a densitometer. Use ours.

At Polaroid, there is a book of curves of dozens of film-developer combinations. These were produced by exposing a film, under conditions of accuracy unobtainable by us, to increasing amounts of light. The many films were then developed in various developers for various times. Their densities were read and plotted as a curve. They are called "H&D Curves." When you lay the curve of one film on top of another (they are on onion-skin paper so you can see through) you see that all the curves closely match. Exceptions are films developed long or short, but I'm talking about films exposed for Zone I and developed for matching Zone VIII densities. Perhaps one film will be a fifth of a zone denser at about Zone IV, etc. than another, but there are no differences that look like they would amount to anything. I remember comparing an Ilford 400 speed film with Tri-X and, though the Ilford film was a whole stop slower, the curve

shapes were identical; according to the densitometer, they should make identical prints. The Ilford was a film I had tested in actual work and found vastly different (and inferior) in atmosphere to Tri-X. Then I looked for the worst (opinion) to compare to the best (more opinion.) Plus X in D-76 compared to Tri-X in HC-110. A sensitometrist, looking at the curves, would declare them the same, but a good judge of print quality can spot the flat harshness of a Plus X print across the room.

Many scientists are enthralled only by facts, but Land, the inventor of Polaroid and a great scientist, knew that more mysterious values were also involved. That's why Polaroid employs photographers as consultants. Their materials show it; the type 52 film is capable of prints that are as beautiful as the most highly skilled printer could produce.

There are several things that are peculiar to Polaroid materials. The film varies greatly from normal films in spectral response. Polaroid is extremely UV sensitive. Try this: set your meter at 400 and photograph a gray card indoors with tungsten light. If you get a matching gray print, your tungsten speed is 400, if you don't, try other speeds 'til you find out what your tungsten speed is. Now take the card outdoors and you will find that the outdoor (UV) speed is from double to four times the indoor tungsten speed.

No meter will work for both Polaroid and normal film because if you were to program a meters' spectral response curve to work for the eccentricities of Polaroid, it would not work for any regular film. Because it is necessary to hit the exposure within a 1/4 stop with Polaroid (because no darkroom

manipulation is possible) it is rare to nail a Polaroid "Fine Print" on the first sheet of film. A bit of trial and error and you can soon see the effect of a quarter, half, or full stop.

Paul Horowitz told me of an interesting experiment. They put eyeglasses on a group of people that inverted their view of the world. A bit disorienting, wouldn't you say? The amazing result was that the subjects were able, in a very few hours, to perform almost as though they weren't wearing the glasses. They could walk around, eat, and function pretty much as before, and without nausea or discomfort. Photographers who have never used view cameras and are concerned about viewing the image upside down are surprised that after a half dozen exposures they no longer notice any effect.

I find the inverted image helps enormously in achieving balanced compositions and tonalities. For that reason many 35mm photographers, including Henri Cartier-Bresson, have installed view finders that invert the image. Painters invert their canvases from time to time to see how they are progressing. I use an additional technique to further abstract my view of the image: I deliberately blur the groundglass image by removing my reading glasses. (If you don't need glasses, you can squint to achieve a blurred view of the ground glass.) I only do this to help me with the arrangement of dominant shapes and tonal masses. When I have the picture pretty well laid out, I put on magnifying glasses to focus sharply and make final adjustments. Squinting (or no-glasses) and inverting I also find useful in evaluating

prints. I also squint through the viewing filter. Try it. I'd like an inverting viewing filter...Paul?

A dealer who had seen my video, which showed a few prints from my collection, called and offered me an attention-getting amount of money. And Eric Smith, who I met at our workshop last year, sent me an article from The Los Angeles Times dated Feb. 11, 1990. It showed a Weston print I own priced at six figures and I have another of the same quality and scarcity. Though I bought them for small money, I didn't buy them to sell and I have no intention of doing so. But I'm glad I have them, because I couldn't afford to buy them now. The article says, "Photography, the last major chunk of the art market to remain relatively affordable, is going the route of painting and sculpture. At last year's auctions, record crowds vied to pay prices that topped the \$100,000.00 per print price for the first time."

No fair. The photographers who made those pictures got little. Atget got a few dollars, Weston's prints were either given away or sold for ten to twenty-five dollars. Recent print prices of other deceased photographers: Paul Strand; \$68,000.00, Man Ray; \$121,000.00, Ansel Adams; \$35,750.00, Edward Steichen; \$110,000.00.

But there are still good buys available. Prints by such greats as Walker Evans and Josef Koudelka come to mind. All my recent purchases were handled by Jill Quasha. I have recommended her services to several people and all have agreed that she is wonderful as both a locator and an advisor regarding photographs. You can write her at her studio

at 180 East 79, NYC 10021.

An increased environmental sensitivity has resulted in a lot of interest in the effect of photographic chemicals on the water supply. I have been in contact with Kodak and they sent me reams of studies. Though they may have a conflict of interest, their message is strong; that photo chemicals aren't. "Photographic chemicals and wash waters are compatible with biological treatment systems. Most of the chemicals are biodegradable and effectively treated when discharged to municipal sewer systems with biological treatment....There are no lubricating oils, greases, or detergents present; the effluent is free of flammable and explosive materials; and the color and odor are very slight." If you want lots of information and test results, write Eastman Kodak Company, 1669 Lake Avenue, Rochester, NY 14652.

I have been using a household septic tank for years with no noticeable problem. My guess is that the alkaline properties of developers is pretty nearly cancelled by the acid in stop baths and fixers. Also, the tiny amounts and enormous dilutions of these substances that are produced in a small darkroom are minimal and always followed with a quantity of clear (wash) water. Actually, a gallon of stop bath is about the same as six ounces of vinegar.

I've been looking through some old files. I like the one called, "Our Forgetful Authors." From a letter from the photo writer David Vestal dated March 27, 1979, here's a paragraph which I'll quote in full:

All in all, a good performance,
which I like well enough so I
want to buy the cold light head

from you. What's the price?
(Catalog snowed under rapid
paper drifts in my office: will
excavate, but meanwhile, ask.)"

I wrote him to keep it, my treat, and that I
would feel amply rewarded if he would tell the
world (in Popular Photography) what he had
just told me when he got around to it. In
January, 1982, he got around to it:

"In short, the whole
controversy is nonsense. If
you've been tempted to trade
in your condenser or diffusion
head for the other kind (cold
light) to improve your
printing, don't bother. It
won't. Except in overall
contrast, they print alike.
Just don't scratch your film."

More odds and ends: Yes, all view camera
lenses have flash synchronization. Pros
wouldn't be able to live without it; they use
flash on every studio exposure. Because the
shutters are leaf type rather than focal
plane, they synch at any speed. So set your
highest speed to eliminate the possibility of
ghost images.

An optometrist nearly went into spasm last
summer in my darkroom. I was doing the usual;
cleaning my enlarger lens with a piece of
clean paper towel. He told me there are
substances in those papers (did he say
silicone?) that will mess up the coating of a
lens. Use lens tissue and if juice is needed
for real dirt, blow a good HAH on it.

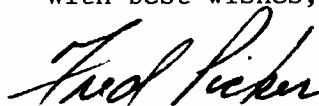
A good trick. Did you know that Avon Skin
So Soft bath oil is about the best, cheapest,
and safest discourager of biting insects you
can get? Another good discourager is "Bounce"

which looks like toilet paper but is used in the clothes drier. You can use it in the drier, wipe your face with it, and wear it around your neck as a scarf. A toilet paper scarf...

Several people have called to ask about an optical mirrored gadget for aligning your enlarger. It's expensive and I haven't tried it, but I know what will work better and is free. Get a glass shelf from the bathroom medicine cabinet and hold it up against the barrel (rim) of the enlarging lens. Now hold an unsharpened pencil under the glass, eraser end up, and focus down 'til it presses the glass up against the lens. Now take another unsharpened pencil and feel under either outboard end of the glass. Adjust the lens stage 'til the second pencil is snug. Now turn the glass 90 degrees (front to back) and feel again with the spare pencil. Adjust as necessary. Now put the glass in the negative stage, close the head on it to hold it snug. Lower away to a pencil placed under either end. Then feel with the pencil under the other end, and adjust. If the pencil won't reach, use any dowel, rod, stick, or yardstick. Now turn the glass 90 degrees and do it again. This method is more accurate than any optical device can be and saves you money.

I'm off to my barn to gather up the trays and jugs and tools for another workshop. I can look back over about 24 years of teaching workshops; this one will be about number sixty. I wonder what this years students are going to teach me... That's what keeps it interesting.

With best wishes,

A handwritten signature in cursive script, reading "Fred Riker". The signature is written in dark ink and is positioned below the typed name.

ZONE VI

N e w s | e t t e r

November 1990

Number 64

"The more things change, the more they remain the same."

Alphonse Karr, 1808-1890
Les Guepes, 1849.

You may have heard rumors that Zone VI was sold. They are true; on June 29, 1990, Calumet Photographic, of Chicago, became the lock, stock, and barrel owner. This happened with the enthusiasm and consent of the parties. I am delighted; Zone VI has come a long way from the garage and its one man sales force, packing department, advertising agency, catalog writer photographer, product developer, etc. (same man). Trouble is, I came along with it and though it's been a lot of fun, it's also been a lot of work. Time for photography was getting squeezed and new things that Zone VI should have been doing were not getting done.

I've always felt that Zone VI should be -and was- different from most photo companies. Having a photographer, rather than a business man, meant that we did a lot of things that probably wouldn't make a lot of sense to a Harvard MBA, but things did happen that well-advised people wouldn't (at least they didn't) attempt. We developed items of small appeal for most people, but great utility for those sophisticated enough to utilize them. Paul's inventions; the Stabilizer,

Compensating Developing Timer, and, most of all (if you ask me) the ONLY accurate exposure meter in the history of the medium. Plus a few other foolishnesses. A nail-biting trip to the bank to start a camera building company. We did things we wanted to do and did them with insufficient regard for the risks. And our customers appreciated that, I guess. Anyway, they always bailed us out! But I have to admit, it's a nice relaxing kind of change to finally be on payroll rather than always making payroll!

Where to from here? Onward and upward, where else? Calumet is a fine company and they have the desire, the expertise, and the financial werewithal to develop new products and make Zone VI an even more important contributor to the medium than it has been in the past.

Many of you have written expressing concern as to the future of the "character(s)" of the company. We're all still on hand and more things will stay the same than will change; I probably will continue never getting the Newsletter out on time, but I'll have less excuse (after this one...) And I haven't gotten a print out to the print club this year...

Wait 'til you see our new catalog and you'll know why this Newsletter is so tardy. It seems, to me, about the size of the Sears' Christmas offering and it took a lot of time

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to assemble. I hope you like it.

Another thing that has taken time was the production of a new Video. This one, like the printing one, was filmed by John Karol, but it concerns going out and photographing in the field. It covers the making of seven photographs and it was strange to do. First time I tried to photograph with a microphone taped to my shirt and three guys dancing around with big cameras and tape recorders. You wouldn't believe the gear required, and I made it worse by insisting we figure out a way to show the camera ground glass as the camera was manipulated. How can you see to do that, you ask, when the video camera is aiming at the groundglass? AHA; you view the groundglass on a little video monitor (TV set) as you pan the camera and tilt the lens and focus, etc. It takes a little getting used to, but the effect is terrific. I'm going up to John's place for a few days to edit (you have ten hours of film for a one hour show). I hope we don't have to get rid of nine and a half hours worth...

It should be ready in December and if you would like a copy by Christmas, send \$34.95. (The regular catalog price to non-subscribers will be \$39.95.)

Just spoke to Paul Horowitz. He had an interesting adventure with one of the new foolproof 35mm cameras. The first roll he took was about three stops underexposed. He took it back to the store. The clerk told him he would "have to get used to it and you shouldn't stand back so far" and gave him another roll. It came out fine. Paul thinks he finally figured it out; there is a black paint code on the cassette that electrically signals the film speed to the shutter-aperture, whatever.

If you get a cassette with a scratch, it will signal the wrong film speed. He can't figure anything else (except not being "used to it"). Do you have another idea? Here's one; to outsmart it, use tape over the black marks and buy ASA 100 film. It defaults to 100 if it doesn't receive any information.

Make sure you know at what distance the flash gives good exposure. Photo someone in the dark at six, eight, ten and twelve feet, or four people stationed at six, eight, ten and twelve feet. One will be OK. If you feel a mite creatively hampered by having your camera-to-subject distance mandated by a machine, (as well as your exposure, aperture, shutter speed, etc.) that's the cost of "progress."

My Foolproof's flash is OK at eight feet, but in a last try for artistic independence I decided I wanted it to be OK at six feet. Two thicknesses of Scotch tape over the flash makes it OK at six. I feel as though I have broken some law...Why am I bothering with this foolish toy? It's excuse for living is supposed to be that it's dependable for acceptable tourist-level pictures. But last week it quit. It wasn't the battery, it was some electrical malfunction that is now being examined somewhere in Kansas, I think. Why don't I stick to my old Leica with the shutter speed dial and the aperture ring and the focus control? All are seeable, touchable, positive and, so far, unbreakable? Because I bought the other camera and I dislike being defeated, I guess.

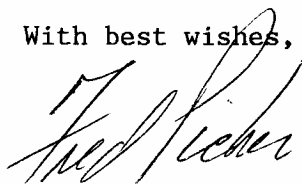
Not long ago I received a rather

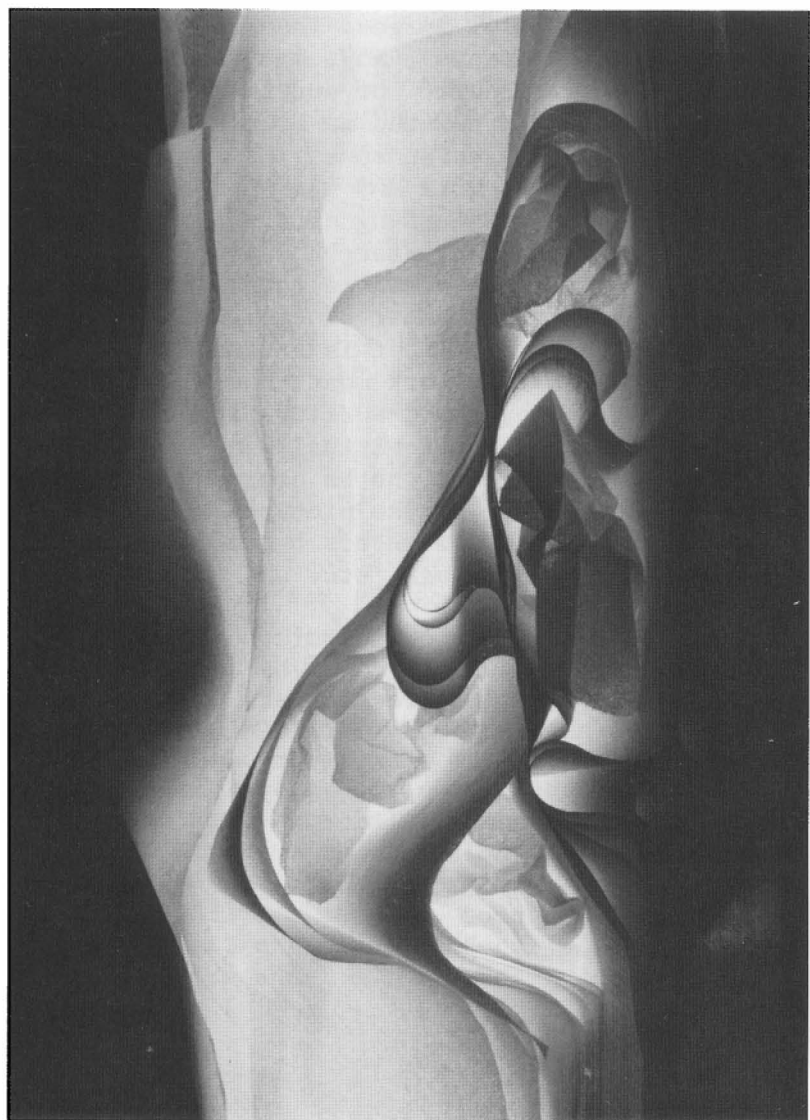
extraordinary gift. It was from a young man who attended my workshop last summer; Scott Van Allsburg from East Lansing Michigan. Scott made some wonderful images. Then he made superb contact prints (4x5), mounted them and prepared a small number of portfolios. They are beautifully presented in a custom case. Scott has added a cover sheet, nicely printed, that concerns the work and his approach to it. Altogether, an outstanding effort and an elegant result. I have taught a lot of workshops and I suppose more than 2,000 people have attended. The number of them who have "gotten it together" to this extent is small.

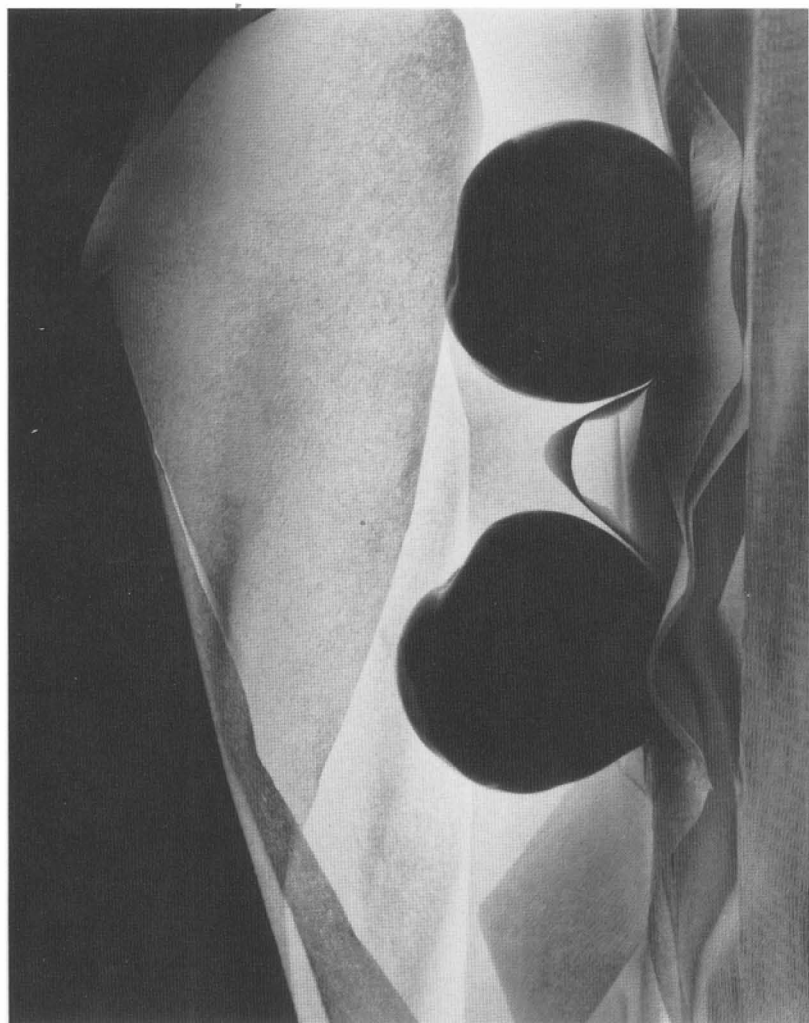
What makes this work most unusual is that Scott, as a young, hard-working father of a new baby, found he had virtually no time to get out to photograph, so he decided to photograph at home. These pictures were made during stolen moments in his bedroom. The subjects are paper bags, etc. and the lighting is from one bare bulb.

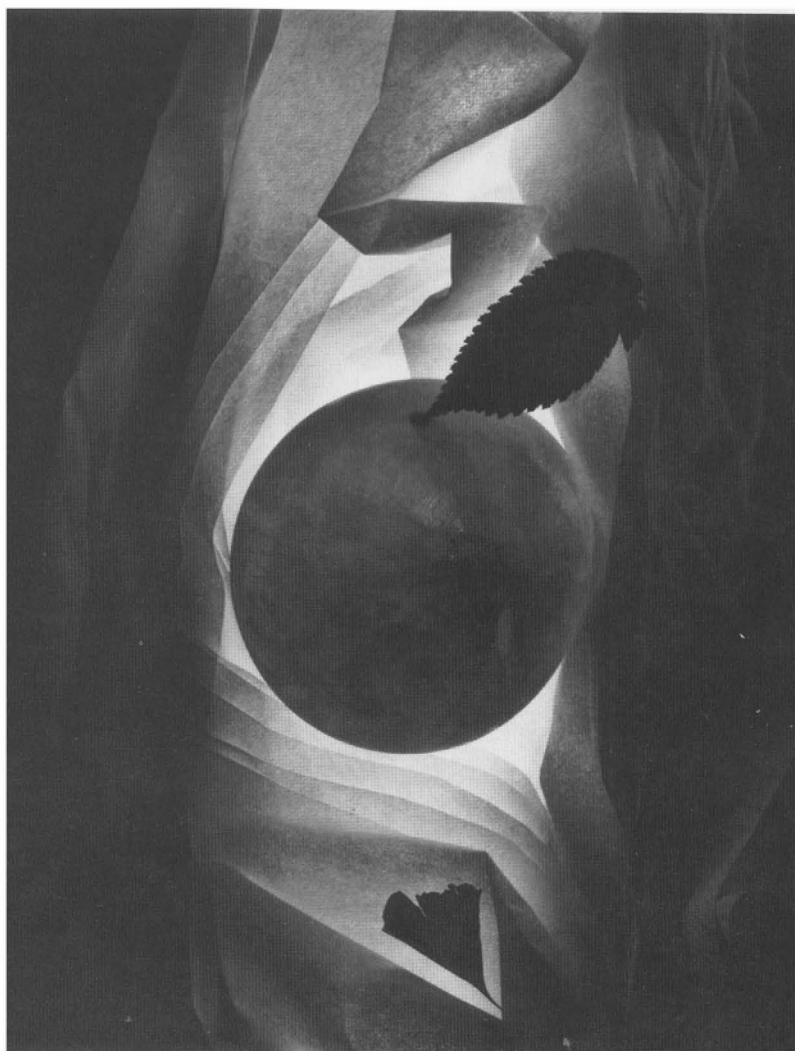
I think Scott's work should be shown for two reasons; because it deserves to be and because it might encourage others to see what a person with relatively little time and experience, but with sensitivity and desire, can accomplish. I hope you enjoy these photographs as much as I do.

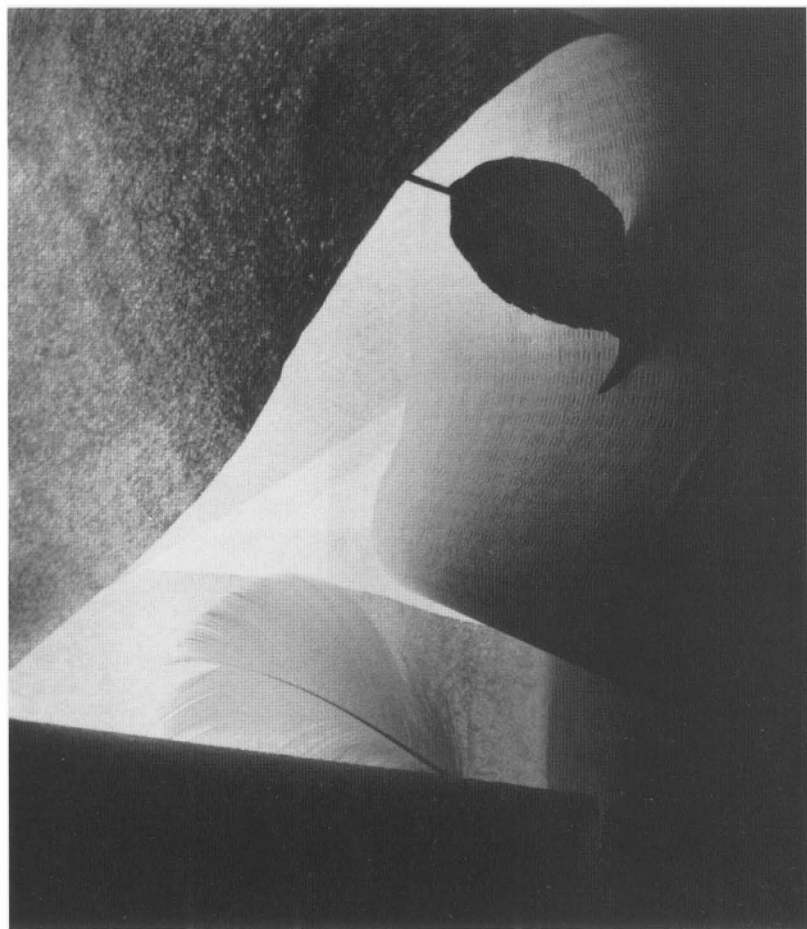
With best wishes,

A handwritten signature in cursive script, appearing to read "Fred Fisher". The signature is fluid and stylized, with a large initial "F".

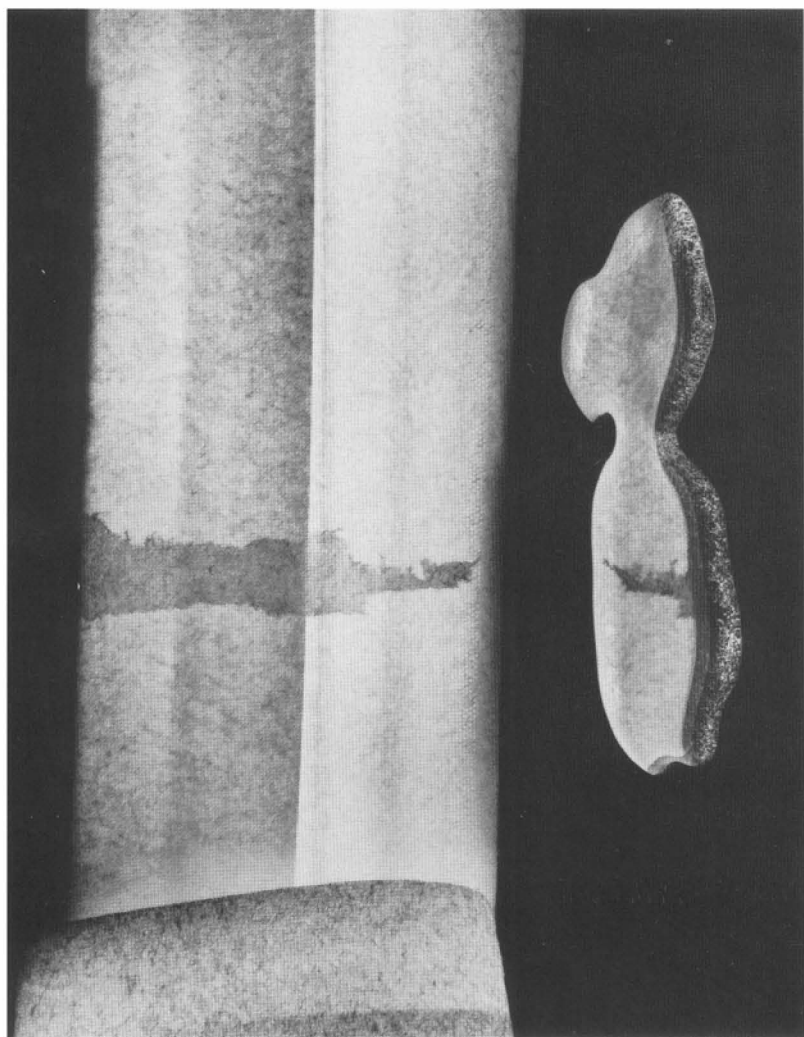


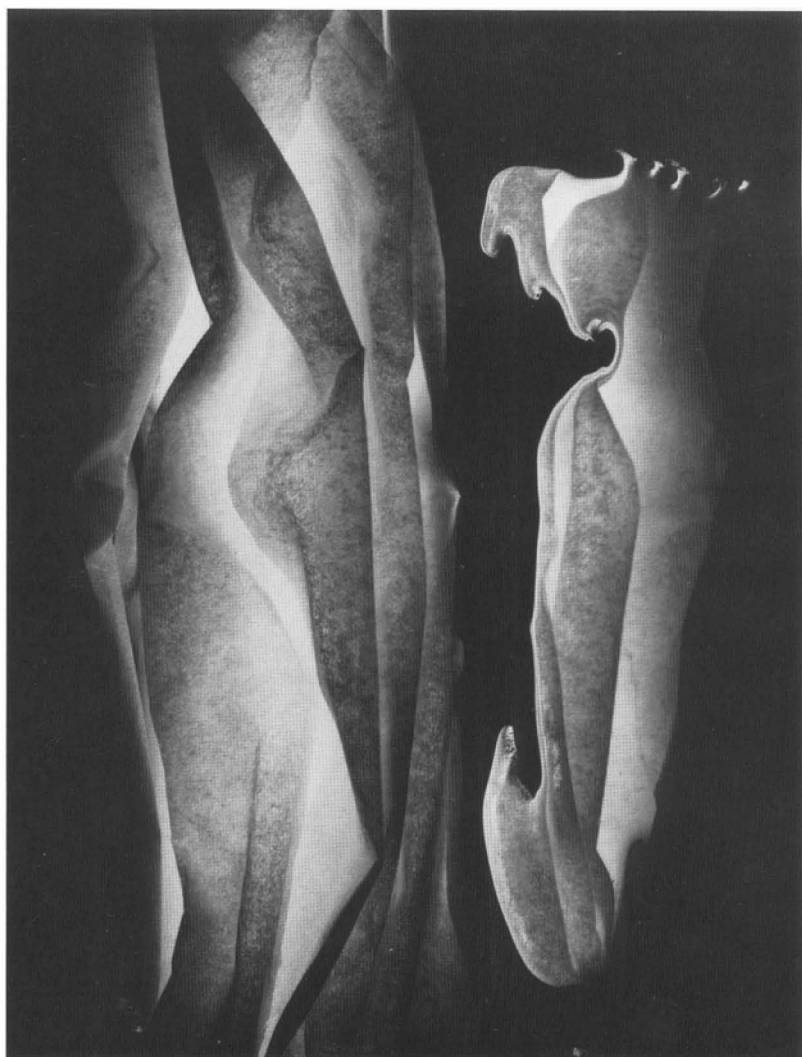












ZONE VI

N e w s | e t t e r

Newsletter 65, April, 1991

" 'Music I heard with you was more than music.' Exactly. And therefore music itself can only be heard alone. Solitude is the salt of personhood. It brings out the authentic flavor of every experience."

Rewards of a Solitary Life
May Sarton

Last fall I made some photographs accompanied by a film maker, a sound recording man and a general assistant. The last time I had photographed in company, except for portraits, was when I travelled with another photographer. He was expert; you would recognize his name. We would drive along and he would say, Wow, stop here and I would say, Of course and he would get out and go to the left side of the road and I would go to the right. We saw everything so differently that we never got in each others way. But making a video was different. Not only did I have to photograph in company, I had to say what I was doing and do it twice (or eight) times so John Karol could photograph me from different distances and angles and get details (finger pointing to a meter or stopping down a

lens, etc.) And do it under the threat of weather changes and the pressure of the running meter. To say it was distracting to try to make good pictures under these conditions is an understatement. I was pleased that the pictures came out quite well. I didn't much enjoy photographing with the attendant gallery, but I suppose experience takes over and bails you out.

This is contrary to (my) long held beliefs. When I made a print for a group at a workshop, I always tore it up, though we could find no way to improve the final effort. My reason was that if I could do it with ten people watching, chatting, etc. I could do it better without them. Now I'm not so sure; perhaps you just focus in strongly and filter out the intrusions. I do know that my system of exposing in three second bursts and listing all printing manipulations came about through necessity. It happened gradually, through workshop printing sessions, because there was absolutely no other way (for me) to remember complicated, and changing, print refinements while explaining something or answering questions. Matter of fact, I know of no one who can keep track of many manipulations under the

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best of circumstances without a good note-keeping system.

Maybe what is as significant as an actual loss of efficiency when working in company is a loss of confidence. You can't believe you will do as well.

In my files I found a New Yorker profile of Henri Cartier-Bresson that might contain a clue to the phenomenon.

"Not long ago, Inge Morath, who worked as his assistant before becoming a photographer in her own right, talked to me about her apprenticeship; one of the things she told me was that Cartier-Bresson had counseled her to look always for composition, for visual order, and let drama take care of itself. (The emphasis is mine.) He persuaded her to try to find a viewfinder that inverted the image, and she found that by working in this "abstract" way she actually enhanced the social content of her shots. The lesson was that "the decisive moment" did not inhere in the story but was an expression of the beholder's form-sense."

Interesting. The "form sense" is an intellectual discipline and perhaps has as much to do with making moving images as the "mood" or "involvement" of the photographer. Because acquiring "form-sense" requires serious study of master-works and discipline and thousands of failed attempts, it's a less attractive notion than the thought that the visually sloppy but passionately involved photographer can

create fine work.

Bach's music is considered highly intellectual, more "mathematical" than most, but its emotional power is unquestioned. I've always considered Strand the Bach of Photography. (Ansel was Beethoven and Cartier-Bresson is Mozart, right?) Strand always emphasized what he called "The architecture of the photograph." His pictures are incredibly moving and very often you don't know why. It is the "architecture." If you get my new video, you will see a picture of the back of the church at Rancho de Taos made by Strand. There is nothing in the picture but the whole building and a bit of sky, but what is there is perfect. And strangely moving. It is said that it was this picture that made Ansel Adams decide to become a photographer. Bach, Strand, Ansel, Cartier-Bresson... "form-sense."

So if we are falling back on our "form-sense" and still making photographs that are moving experiences, is it perhaps possible to approach the work more dispassionately, more intellectually than I had previously thought? Would you want to?

The really good ones could photograph with distractions. I have a snapshot of Paul Strand making a picture of a vine-covered frescoed wall in France. Next to him is, apparently, a local guide holding an umbrella to keep Strand's 8x10 dry. And on all of his later books, Hazel Kingsbury accompanied him. He attributed the

power of the portraits done when she was with him to her sensitive handling of the subjects. There are many good "teams" of photographers whose picture credits carry both names. I'm sure that it greatly depends on the sort of person you are; if you are a "loner" or even a super loner (in Vermont a super-loner is called a "hider") you will find more happiness photographing, even if you can get the job done in company, alone.

Speaking of Strand, I received many letters concerning the recent show of his work in Washington, D.C. The show will travel to Chicago next, then St. Louis, Houston, San Francisco, and London. About the pictures, The New Yorker said, "In Strand's meditations on people, architecture, and nature, in various places around the world, you can witness his exacting rendering of the complexities that can be understood through simplicity." About the catalog they said, "The reproductions, crafted by Richard Benson, are so fine that you could hang the pages on your walls. Each plate is a victory of tone, detail, and texture, a celebration of Strand's perfectionism." I recently received the catalog. It is expensive; \$100.00, but cheap for what it is. It contains 148 great photographs. Treat yourself. The publisher is Aperture.

I met Chip Benson when he shot the halftones and supervised the press run at Meriden Gravure of my "Iceland Portfolio." The Strand book was also printed at Meriden. It was exciting to

read the profile, also in The New Yorker of Chip. It is always a delight to find that someone who is really good is getting proper recognition.

In 1982 the National Geographic ran a cover picture of the Pyramids at Giza. One of the Pyramids was re-positioned by computer. Photographers have always been able to make the camera "lie" by controlling the content of their images, or by choosing out-of-context moments during which to take them; a building on fire is not the typical condition of that building. But now, using computers, parts can be added, subtracted, moved, changed in size, etc. Two or more photographs can be combined into one. All without leaving any evidence.

The implications for photography in general and photojournalism in particular are of great concern. Suddenly our pictures are open to question. We can no longer depend on photographs as our witness to time and place. And what of the usefulness of photographs as legal evidence?

The technology is called "Computer Imaging." Andy Grunberg wrote in the New York Times, "In the future, photographs will appear less like facts and more like factoids -as a kind of unsettling hybrid imagery based not so much on observable reality and actual events as on the imagination." Alongside the article was the famous

photograph of the Yalta conference. Roosevelt and Churchill were still on hand, but Stalin had been replaced by Groucho Marks and a new presence; Rambo, had been inserted as overseer. It looked real.

In the future, readers of newspapers and magazines will wonder if the pictures they see are of actual events or a sort of camera-based artists' interpretation. Just knowing that the possibility of manipulation exists will make photographs seem less real than they once did.

What does all this mean to photographers like you and me? How nice it would be, in commercial work, to create a perfect lawn to replace the bombed-out foreground of most new buildings. Why not graze a herd of deer thereon? White ones. They might look especially fetching under the thin sliver of new moon that I would hang, just so, in the upper left hand corner. The TV antenna and utility poles? Disappear them. Not bad, but now what of the personal work? There's the rub...

What initially made photographs so exciting to me was the (then) fact that what they portrayed was the thing as it really was, at least at that moment. I'm reminded of the wonderful Cartier-Bresson photograph of the fat fellow in mid-air over his mud puddle, the magic moment when Strand recorded his portrait of "Mr. Bennet," and the hundreds of Ansel Adams' pictures made during the rare moments when the forces

of the earth and skies combined in magical ways. If a painter had made those pictures would the viewers' knowledge of his ability to manipulate, by brush and color and composition, have reduced their dramatic impact?

And the thrill of making pictures to me has been in solving problems in order to get said what I wanted to say about the things I was photographing. Though I had some control, the ultimate essence was the property of the subject. But, though I have no intention of performing computer tricks on my pictures (as a computer illiterate, I would be inept anyway) I am slightly troubled that some day someone might wonder whether I moved (or inserted) the horse, just so, by the tree or waited two hours 'til he actually arrived there.

In the foreseeable future, the computer-generated picture is not as alarming as I had at first feared. I had read that there was a software program that could do the job on a Macintosh computer for less than \$1,000.00. There is and it can, but I understand the results are crude and easily distinguished from a decent print. There are, I understand, two machines that can really do the job. They are made by Scitex America in Medford, Massachusetts and Eastman Kodak. The Kodak system is called the Premier Image Enhancement System and it can make a fake negative that looks real. For the information of those who care, the system first reads the

original film image into minute picture elements (pixels) and converts the image into digital information. Then you can edit the image on a display screen. It doesn't do it right then, but in a separate step called postprocessing. After that, you can write the edited image onto output film which you process and print as in the old days.

Because they cost more than half a million dollars, these machines are now in use only by large publishers, printing houses, etc. But I remember that only about twelve years ago I bought a single drive floppy disc Wangwriter; a word processor only. It had less memory than I have and cost \$8,000.00. Can the affordable imagery machine be far away?

In the last Newsletter, I discussed some aspects of lenses that I had found of interest. The discussion produced two very interesting letters from people who, I am sure, have more specific scientific knowledge of the subject than I. The first is from Bob Schell, a fine photographer and knowledgeable writer:

Dear Fred, Thanks for your thoughtful letter of the 8th. I'm just now getting time to sit down, think about it, and reply. I'm doing some writing for the West German magazine Color Foto and just finished an assignment to write a crystal ball piece on what's

coming in optics, so my mood is right.

Unfortunately, lens makers are a very poor source of information about their products--frequently their published MTF curves and other data are wishful thinking.

The apparent contrast and sharpness of a print depend on many factors, but if we isolate the taking lens from the rest it comes down to MTF, that is how accurately a lens will translate the light values presented to it. Think of these light values as a jagged line on a graph, light areas are peaks, dark areas are valleys, and the slope between determines the gradation from light to dark. If you present any lens with a square wave--that is a transition along a knife edge from brightest possible area to darkest, the ideal lens would produce a square wave output, black and white with no gray. In reality, this never happens. The slope introduced into this square wave is called edge transfer function, and is far more important in lens design than either contrast or resolution, both of which contribute to it. The concept of edge transfer as a measure of optical quality was originated by Leitz scientists, and spread from them to the rest of the German optical industry. When Leica measures MTF of lenses, they use relatively low spatial frequencies, from 5 .1 pmm or so to a maximum of about 20. In other words they are measuring contrast at quite low levels of resolution, representing no more than 5 to 20 lines per

millimeter; quite low by anyone's measure. They are more concerned with keeping the edge transfer values high, that is keeping the slope of the input and the slope of the output equal.

The Japanese, on the other hand, tend to measure MTF at higher frequencies, they show a greater concern with the detail resolution than contrast. They could care less if the wave form goes to hell so long as those tiny details are resolved.

Perhaps our problem in discussing this is a matter of semantics, because print contrast, of which you speak, and optical contrast, of which I speak, are not the same thing. When you speak of contrast, you are speaking of the ratio between maximum black and white to in-between gray tones. When an optical scientist speaks of contrast he is speaking of how accurately output wave form reflects input wave form.

Sharpness would be somewhat reduced by making very large prints, but only if they are viewed at an inappropriate distance. If viewed at proper distance there should be no apparent loss of sharpness. As the print is made larger, the circles of least confusion are also enlarged, and will begin to look blurred at a certain point. The size of those circles is partially a function of lens design, so that may contribute to the picture as well.

I don't claim to know all the answers. I'm not an optical designer, I just know and have access to a bunch, and have worked with them on projects.

I know that when I say that Germans favor contrast and Japanese favor resolution, I am speaking the consensus of these more learned minds.

You are probably right in likening this to the effect produced by the VTE films, which I have never cared for. To me it looks harsh. When H&W was selling their re-packaged microfilm for ordinary camera use, I tried it over and over and never got good results. Same goes for Technical Pan in all sorts of fancy developers. I still find I get my best results with a good medium speed film like Agfapan 100 or T-Max 100; they seem to have the best balance of characteristics.

The second letter is from Jean-Francoise Remillard. It seemed authoritative, so I sent a copy to Bob Schell. Though they disagree on several subjective points, Bob allowed as Jean-Francoise certainly knew what he was talking about. I'll print his letter next time.

Friend Orville Stokes writes: Germany spends \$73.00 per person to support the arts, the US spends .71; that a recent issue of a \$2.95 photo magazine devoted 88% (183 pages) to ads, 12% (25 pages) to editorials.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s | e t t e r

Number 66, June, 1991

I kept overcomplicating,
in the way beginners do
before they learn how to
be simple, and the compli-
cations kept on getting in
my way.

Harvey Oxenhorn,
Tuning the Rig

Overcomplicating isn't limited to beginners. It is a technique of experienced folks as different as politicians and photo writers. My suspicion is that both usually don't know what they are talking about and hope to disguise that fact by larding their chat with incomprehensible techtalk. Neither has any idea of how to get anything accomplished.

Try this one as an exercise in obfuscation: Question: "I've become used to determining my exposure using an 18-percent gray card. This works great for close-ups and most other situations while sitting in a blind. If I start using a spot meter, what should I meter on?" Expert's answer (in Tech Tips, Outdoor Photographer Magazine). "In any metering situation, the photographer must determine the

most important aspect of his or her composition. That usually means that the important area or subject gets the best exposure. It's easy if the entire scene is evenly lit, but don't count on it. Usually some areas are in full sun and other areas are in shade. Expose for what's important and possibly compromise a little in exposure toward the other areas. If the main elements in the photograph are not properly exposed, the whole image will usually fall short." Thanks fella, that sure cleared things up. But it's tough on the few of us who try not to have unimportant areas in our pictures...(How much more useful if he had said, "Place the high value on VIII -three stops more exposure than the meter reading- and take the picture.")

Lots of photo guys add another element -their own magic. "When suddenly I have the feeling that overcame me on the delivery of my first born, I snatch the print from the developer." This is of minor value to a guy lacking experience of first borns or, in the event he's had one, memory of the feeling that overcame him at the time. Those of us who have made tens of thousands of prints, never get any emotion from a piece of paper turning gray.

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Because of my unusual entry into photography (collecting photographs long before trying to make them), I have always had, as my primary focus, the emotional content of the photograph. It soon became apparent that if I had to follow every new film and technique that I read about I would never get to making a picture worth looking at. And another thing struck me: have you noticed that these technoids can't photograph for sour apples? Just think, if you had a chance to illustrate an article in a magazine going to half a million souls, would you put in a boring "test" picture of a corner of a room, half sun, half shade? (You would only if that was your best picture.)

Folks keep asking me if I have re-tested or "solved" T-Max film. Nope; it got its chance and I have better things to do.

One day I got a call from a famous photo magazine writer. He was on his way to teach a workshop and wanted to stop by. Anxious to see his work, I said please do. He came. Empty. No prints. I asked him what he was going to teach at a workshop for a week without any pictures of his own to show. He said (you guessed it) "The Zone System." I always introduce my Zone lecture at workshops as follows: "The Zone System has been of great value to photographers. The photographers to whom it has been of most value were Ansel, Minor White, and me." Let's face it; it's a method

of getting a usable negative, and lots of folks made lots of gorgeous photos before there were either zones or light meters.

I have tried hard to teach with the goal clear in mind, to help people simplify to get past "technique" to the point of making pictures worth looking at. That is incredibly difficult; not getting past "technique", but making those pictures. And while I'm at it, I think "technique" is a silly word to describe the mixing of chemicals or the agitation of a print. These are mechanical operations and "technique" should be confined to something a little more esoteric. Like the bowing Casals might employ while performing the Bach Cello Suites...

Either my message isn't as clear as it might be or the human being is more obstinate than is good for him (or for his work). I still get film speed tests from people who send three different brands to test. They haven't any idea of what they are looking for so what is the "test"? How do you get up in the morning and decide to use Plus X today? How do you remember that it was Plus X you put in the camera? Worst of all, if you use more than one film, you'll never learn the nuances of any of them. Like the guy in the Western said, "one gun is enough if you know how to use it."

Some techies buy densitometers and draw curves. To their disappointment, curves for all the films can be made

to look nearly identical by slightly adjusting the developing time. I remember seeing a book of curves at Polaroid. Dozens of film-developer combinations. They were on onion skin paper and you could lay one on the other to see the differences in curve shape. There were no differences. Well, maybe at Zone V one film would show about a fifth of a stop more density than another when the zone I and VIII values matched. Big deal. The trained sensitometrists declared that identical curves would make identical pictures. That's what makes them sensitometrists, I guess. And that's what made Doctor Land hire photographers: to try to point out the differences in print quality (atmosphere) to his sensitometrists. The quality of Polacolor and Type 52 black and white film are eloquent testimony to the worthiness of Land's approach, and the contribution of a dozen photographers (Ansel was the first) shows what can be accomplished by overriding the college kids and going to the source.

I suppose I've always been contrary; it has seemed a good way to make sure that the opposite of what I'm told might not be right. I've learned that you can believe absolutely no one and must make real tests to find out whether a thing is going to do what you want it to or think it should...

I just got interrupted by a typical call. Fellow said he was

unsuccessful in preventing the X-Raying of his unexposed film and was on an important, expensive, trip. Should he use that film? I asked him if he could get fresh film and he said he could. I told him to get fresh film for the trip and when he got home to make a picture with the X-Raid(ed) film and compare with an identical picture made with the virgin film. If it was no good, throw it out. He thought he'd "take a chance" on the X-Rayed stuff. The above illustrates rather graphically the difference in approach between the average Joe and the serious worker.

Today I received a film speed test from a fellow in Australia. He asked that we Fax him the result as he was off in a day or two on "the most important 'shoot' of my life." Major trouble. Suppose he did the test wrong and the frame he thinks he exposed at ASA 160 was really exposed at 320. Before a trip to Africa, I went through a two-day "dry run" photographing farm animals with various cameras, lenses, color films, etc. When I got to Africa, I was READY. No one else was; some had picked up new cameras at the airport!

Here's how a pro works: In a new situation of *any kind* he sets up a series of tests to find out what happens. Suppose the assignment is to photograph a person running across the scene, thirty feet away. Speed should be indicated (blur, pan the camera?) But you also have to freeze the figure

and the \$250.00 running shoes which are what the picture is about. Flash strobes?

You start with an idea, assume it is wrong but you have to start somewhere. What you want is one foot on a rock; a *controlled error*. Idea one -write it down- is of the runner going from left to right, camera still. Idea two (write 'em all down) is runner going right to left. Never change more than one thing or you won't know what "worked." Why should he look faster running left than right? I don't know, but I do know that different is not the same and he will look faster going one way than the other. (I've done it; I know which way.) Direction is settled. Idea three, pan the camera and fire a flash at mid-point of run. Four, fire three flashes at equal intervals.

Now, get out the Polacolor and your running assistant and do it. You will quickly learn that none of these ideas alone is any good, but a combination of a certain two is a place to start. Start. By the time you get to the final setup and the live models you will know what you are doing. That is why some pros get \$15,000 a day (one picture) and you have to book them a year ahead. But most get \$150 and you can book them for this afternoon.

Why are some winners and some losers? Why do so many pros insist on doing it badly? I am tired of talking to people who "have to print on RC."

The only reasons I can see for that is 1. to make absolutely sure that whoever sees your work will never see anything worse and 2. to assure your own continuing poverty. (I've never heard of a rich photographer using less than the best of everything.)

I still do commercial work. You can bet what you are sitting on that I make sure that no one will ever see a print by another person that looks like one by me. I charge more per day than they do; a lot more, but I deserve it. Can you imagine a Penn or Avedon presenting an RC print to a client?

And don't forget the most important part; if the person is a slob about his prints, you can bet he is a slob about his images. All he wants to do is as little work as possible and it shows. That he gets paid accordingly is appropriate. That he doesn't have the brains (or the avarice) to do what the successful guys do is amazing.

Where was I? Paul Horowitz, who edited this, wrote in here, "bitching." I guess so, but I got (an occasional) right to sing the blues. Simplifying, is also where I was. I guess it means getting a top quality consistent act together. Watch a great golfer; he doesn't seem to do much. The club just swings. Watch a hacker. He seems to be doing everything, but never the same things twice in a row. He'll try a new instructor and a new set of clubs. What he won't try is

what the great golfers do to get great. Work.

Photographers? The same. Change paper, get a new lens. I'm often asked, "what should my next lens be?" I ask whether they are making portraits or taking pictures of the moon. Gear is tools. Imagine walking into a hardware store and asking for a good tool. Choosing one might depend on whether you wanted to make a hole or fill one up. Get the tools to do the work you want to do. Don't buy a hammer and then walk around looking for a nail to hit. If you don't know what tool you need, find a photographer whose work is admirable and similar to yours and ask him what he uses. Buy it; he knows what he's doing (look at his pictures).

My simplifying started out with the Proper Proof. Why didn't anyone else figure that there was a theoretically proper time for proofing, one that would illustrate the value (or lack of same) of a negative? With Proper Proofs, I could easily see what was wrong with exposure and development. I think it is the single most useful step in the control of film exposure and development. It constantly monitors how you are doing and indicates changes to be made to "trim up."

Many people keep on testing for film speed, not understanding that the test is to get you in the ball park and, just as important, to find out a bit about how film responds and what

Zone I looks like. The Proper Proof will show everything; if the low values are lower than the meter says they should be, you are not giving enough exposure. Change the ASA setting on the meter no matter what the test said. The object is not to pass the test, it is to make good negatives. Do whatever is necessary.

If the low values are where the meter says they should be but the high values are darker than the meter says they should be, you need to develop the film longer. High values too dense? Develop less. But make sure that you know where you placed the values. The only way to know is with a pencil and paper and the best way is with our Field Data Guide. (I'll get 20 letters about being too commercial.) And make sure the errors are consistent, over a large number of negatives, before you change anything. And NEVER change more than one thing at a time.

Don't freeze up, keep watching your proofs carefully and fine tune as indicated.

It took me years to formalize it, but I think I always knew that the best negative was always the one that had what I came to call "Maximum Printable Density." And once I decided to teach it, the Zone System collapsed as a difficult discipline. It became a no-brainer: place the high value on VIII and take the picture. That makes a better negative and print than any other exposure. Except sometimes: when

you want more contrast or a choice of negatives, place the high value on VI 1/2, take the picture, and develop Normal plus one and a half. (I had it written, "N+1 1/2" and Paul gave it the margin note, "This looks ugly and is confusing at the same time. Congratulations.") That doesn't mean if your normal development is 6 minutes, you develop for 9. You find N plus 1 1/2 by test. Think.

What you want to know is, "how long must I develop a Zone VI 1/2 exposure to match a Zone VIII density." Find out. Develop four sheets exposed to VI 1/2 for twenty-five, fifty, one hundred and two hundred percent more time than your normal and proof them all with your Zone VIII negative. One will match or you can split the difference between the too-much and the too-little negatives. It will be close enough. Fine tune as you go ahead with your work. Want to be absolutely unique? Actually *do* this...

And I've gone one step beyond my "Place the high value on VIII and take the picture" simplification. Reasoning that I always make a back up negative, why not also make it a "choice of negatives" negative? So, I do. All my pictures now are exposed for normal and N+1 1/2 (Normal Plus one-and-a-half?) development. The routine is simple; put the film holder in the camera to expose the even-numbered film first; expose number 10, for example. It will be

developed normal. "Odd" is the other side of the holder, which is number 9. Don't bother to meter again, unless the light has changed; just close down 1 1/2 stops and fire off negative #9. When ready to develop, stack the holders even numbers up, unload all the even numbered films first, and develop them normal. Then develop the odd numbered films $n+1$ 1/2. Prepare to be amazed at how often you will print the plus 1 1/2 negatives. Here's another commercial: the use of this approach is shown in both Zone VI Videos.

I recently received a calendar from The Snowdonia Centre of Photography, Gwynedd, Wales. It says that Snowdonia is, "the home of excellent photographic tuition and the "Zoneight" system of exposure calculation." I thought Dummerston was...

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s l e t t e r

Newsletter 67, September, 1991

"Accompanying the substantiation of archetypically motivated and monistically identified reality, where fractionalism is supplanted by polysynthesism, Uelsmann's work provides trenchant evidence of a concern for figurative-imagistic continuity and relativity."

The British Journal of Photography

The above criticism?-description? of Jerry Uelsman's work was forwarded by my old friend, Doctor Harry Thompson. We'll award a box of paper for the best (funniest) translation.

We saw a lot of photographs this spring. Our contest attracted about 1800 pictures and resulted in about \$18,000.00 contributed to *American Rivers*. Thank you. There were many good pictures, but the three judges, without conferring, each chose the portrait of his son by David King, of Chatanooga, TN. His picture will be in the September catalog.

Some time ago, we printed a Newsletter containing the work of one of our readers as well as my responses to it. There were many letters requesting more of the same. Recently, I received some nice work from William Lytch of

Lakeland, Florida. He consented to its publication with my (unedited) letter:

8/13/91

Dear William,

Sorry so tardy in getting to this, but I left for Alaska shortly after your prints arrived. Let's get at it:

#1. Tough subject to do well, but done well. Great atmosphere; rich print, full of light and substance. The image USES photography. (Lots of photos would have been better in another medium.)

I'm reduced to smallest criticisms. On this, and all subsequent pictures, all I can do is tell you what I would have done. That does not mean you should do it, or we would just have a lot more FP's. But there is no other way I can honestly respond, so you pick up (or discard) what I say, knowing only that it's the best I've got.

Here, I would crop from the right, up to the point where the end of the twig at the base of the tree would touch the picture edge. I measured; 5/8". The reason I would is that the shape of the trunk is stronger without the heavy growth to its right. The heavy stuff at the picture edge pulls

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the eye over there.

The print quality is luminous; is this the same guy whose work I saw not that long ago? I would, however, dodge artfully among the grasses at the left half to get closer to the misty quality of the field at the right. I know this is sensitometrically inaccurate (there IS open shade there) but emulsion is more sensitive than eyeballs and "sees" greater differences than we do, so we sometimes smooth out to make it convincing. And the quality at the right is so fine, I'd just like to see more. Other tones are elegant.

2. Nicely put together. You worked on this one, too. The corners tell the tale...Two things bother me and neither have to do with what was on the groundglass: I am not happy with moving water that looks like something else -cotton candy? (To me.) I realize it was either late or cloudy and you needed to stop down some to focus on the top of the tree at left, but there is usually a way to solve these problems. If there was room, I'd back up for greater depth of field and crop. Or come back tomorrow, or re-think the composition so I could use a bigger f/stop and 1/60 sec. shutter speed.

The luminous quality of print #1 is apparent only in the lower right. I fear that holding back the left would not work because I suspect a thin negative. There is no substance in the black at the center and I think it

would print as a moldy gray. Refer to last Newsletter about always making an $N+1\frac{1}{2}$. It would have helped here, as would placing the high value on VIII. Oops, I just read your description of the negative processing; you went the wrong way! A minus is not what you want and it hurt the film speed also. (It would have been no problem to burn down the left front rock and there is enough dark mixed in with the white water so that even if it blocked, it would look as if it had tone.) Trouble with minuses is they look good on the densitometer, but lousy in prints because, though they do lower the low values less by the *numbers*, they lower them by just as much visually as they do the high values. Because low values have so little separation to begin with. Result is like underexposure.

3. Similar, but better than the last. A beauty. Rich and luminous and a nicely balanced image. See above for fuzzy water; also notice that at too slow a speed, slow water looks greasy.

Tiny adjustments I would make in the print. (None in the image; you are really looking. No one but a photographer would spot that business with the black twig at the edge, upper left, but it's that kind of delicacy that makes things come together.) I would lighten the tree at the right a bit, darken the upper left corner (an inch down and same to the right). I would crop off the two rocks at the bottom. They are not big enough for

information and are real attention-getting there at the edge of the print.

One thing I would want to do to see if there is something I missed. I'd print it very pale on the next softer paper grade. It might just win the luminosity championship of the decade...(Or be a dog -you have to see it.)

4. Beautiful. A tough subject; Weston was there, but this is your picture. You like soft light; I'd push the print to the limits of luminosity -paler, softer. The flat stone at upper left is making a little too much noise for where it is (near the corner.) I'd quiet it down a smidge. And to balance a bit better, I'd lighten the upper right a trifle. Don't worry about merging with the wood; even if it's the same note, it's on a different instrument!

One thing that bothers me quite a lot is the interruption of the sweep at the right. The line that touches the frame and comes back in. Really pulls the eye. Please give me another 1/4" of image at the right, if it's in the negative. Same at the bottom. It's a hell of a composition, but I feel it might need a little more room to breathe. Again, like me, you have to print it and look to see if what I suspect might help, really will. GOOD pic.

5. Nahh. OK for some folks, but not in a class with your others. Lots of Zones and composition and brilliance and no heart. Subject

matter like that, so photogenic, is impossible to resist. (I know; I got a million of 'em.)

A little tight on the right and at the bottom; lines near the print edge create visual "traps" between themselves and the print border. If you print again, trim off the bit of trim at the top of the center post (baby trap!) and lighten up the right half to get closer to the tone at the left. Burn 1/2" at lower left corner. Better still, use the time it would take in the darkroom to go forth and make another pic like the others!

6. Wonderful, wonderful, and more wonderful. Dead, solid, perfect.

Only trouble with this one is matching it! I'll swap you a print for it. If you agree, I'll send you something recent that you haven't seen but I think you would like.

I'm delighted with your improvement and the overall quality of the new work. You are really looking and the pictures have a style that is consistent. Please don't be at all upset with my comments; the hard part (making pictures worth looking at) YOU did. I just added small printing ideas, mostly. And I'm not sure if I'm correct. These are things I would try in order to see if printing improvements are possible.

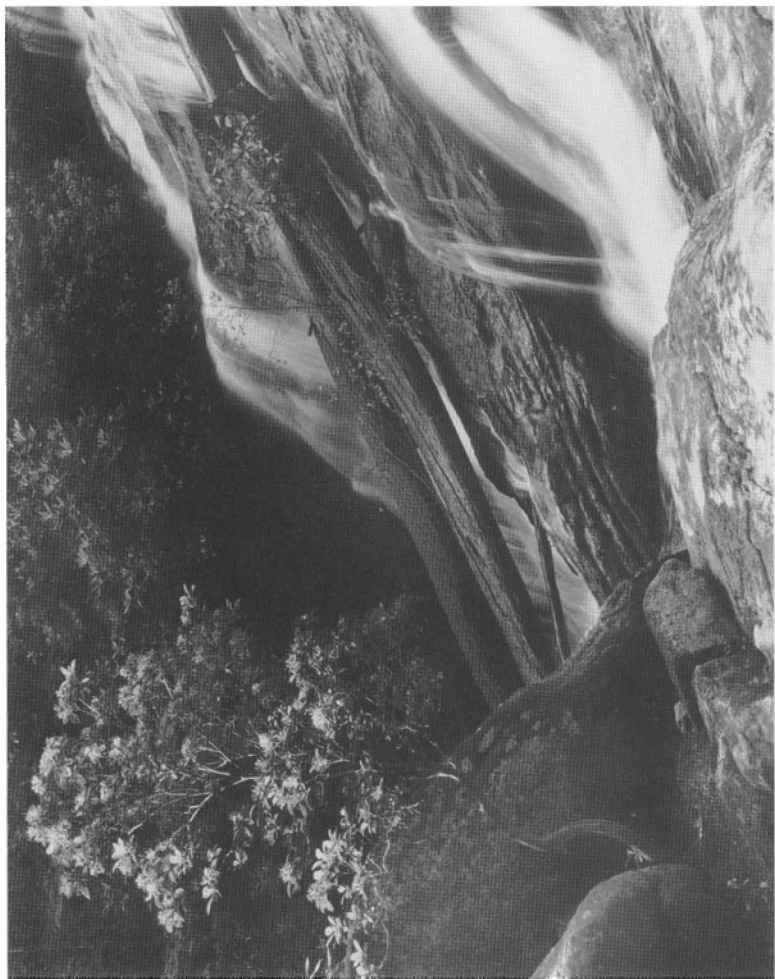
I look forward to seeing next year's! All best, Fred

*

A Workshop is probable for early August, '92. Information on request.



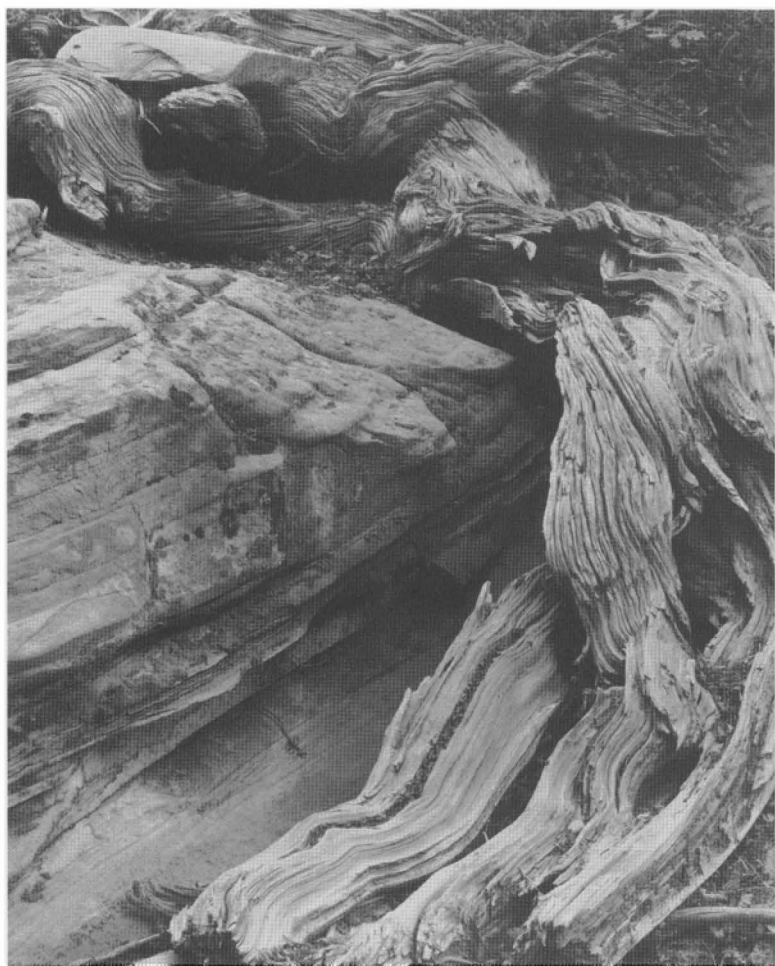
Photograph 1



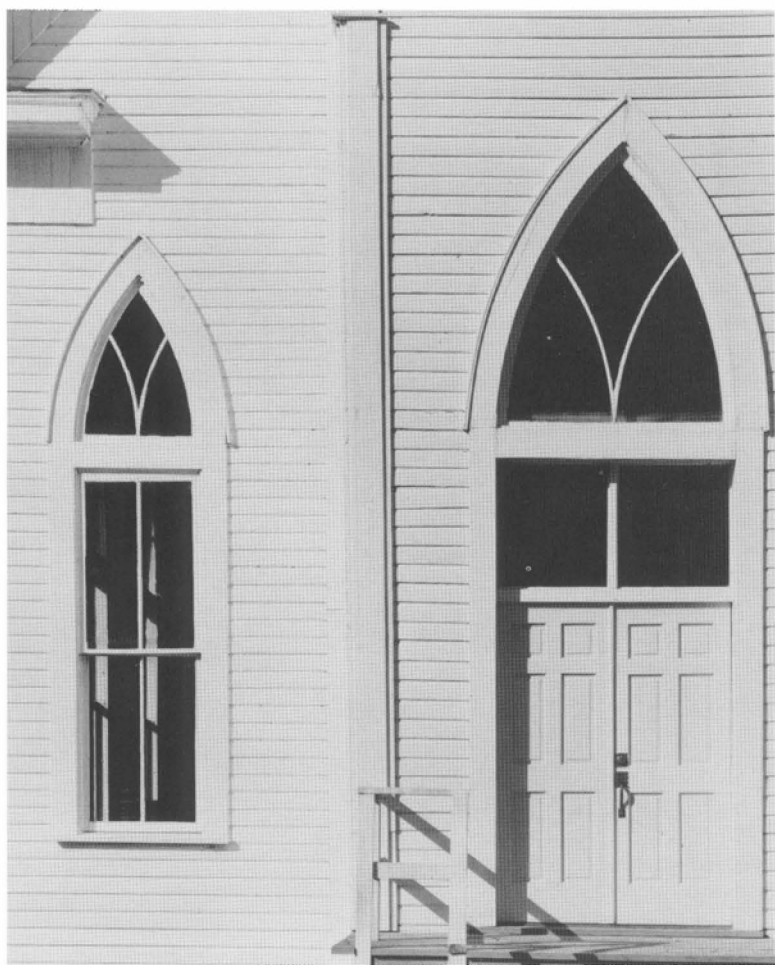
Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6

ZONE VI

N e w s l e t t e r

Number 68, December, 1991

I've got a lighter one," she said, sadly unscrewing the camera from the wrecked tripod, "but it's not heavy enough for the view camera."

"I'll fix it for you," he said.

"It'll never be the same. I'll just have to order a new one from Zone VI." She looked at her watch. "It's cocktail time," she said. "I'll buy you a drink, and, if you're brave, I'll cook you dinner."

"I'm brave enough for that," he said.

Palindrome
Stuart Woods

Michael Johnston (see Newsletter #59, which led off with an *appropriate* quote: "There are more horses asses than horses") has re-surfaced. In Camera and Darkroom (a magazine owned by Larry Flynt, who also brings you Hustler) he recently wrote a scathing article concerning the work of Paul Strand. It was so amatuerish, so infuriatingly stupid, so idiotically insolent, that I sent a copy to my friend Walter Rosenblum. Walter was possibly Strand's closest friend and, in addition, he is a photographer's photographer. (His recent, exquisite monograph is listed in our catalog and

I recommend it unreservedly.) Walter is also a marvelous teacher of long experience. His wife, Naomi, is possibly the leading photographic historian of our time. Her book, A World History of Photography, is considered the standard text.

Walter wrote a marvelous letter to the magazine. It may or may not be published or, if published, will probably be edited. I thought it so thought-provoking and so interesting (great teachers teach even when they aren't trying to) that I asked him if I might pass it along to the Newsletter subscribers. He kindly agreed, so here is probably the only complete, unabridged, unedited, version of his letter:

Throughout a long career in photography, which began in 1938, I have made it a practice never to challenge a review that appeared in a newspaper or magazine, whether it is of my own work or that of another photographer. I knew then, as I know now, that it would be senseless. The reviewer always has the last word; letters to the editor usually are ignored or truncated due to insufficient space. Reviews appear and disappear so quickly and are so soon

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forgotten that it requires an astute reader to remember what was said from one month to the next. Nevertheless, Mike Johnston's review attacking the work of Paul Strand must be challenged for it is so offensive to me personally that to leave it unanswered would be to dishonor the memory of one who was a mentor and friend for some forty years. Along with Lewis Hine he was the most important influence in my life, and while I have no fear that Strand's reputation is at risk from Johnston's superficial remarks, I do fear that young photographers may accept his judgment without bothering to look at the original photographs, which would deprive them of an enriching experience.

In his review, Johnston deals with two aspects of Strand's work, his vision and his technique. He writes, "All in all, Strand's work - as original documents, or living art, apart from its historical significance - seems increasingly passe, at least as regards his standing as a major figure of the first rank of importance in the medium's history.Strand's work is second rate.....it's clear that Strand's work doesn't stand the test of time very well." He then goes on to say "From a darkroom standpoint.... I simply cannot conceive how this man got a reputation as a great printer: Respect for the almost unanimous historical consensus is all that restrains me from calling

his craftsmanship downright lousy." Critics are entitled to opinions but one expects them to be both informed and capable of articulation. In taking on one of the giants of twentieth-century photography, in arbitrarily dismissing Strand's visual ideas, and in questioning his technical expertise, Johnston owes his readers a justification for his point of view which he does not offer. Without such an explanation, his opinion is worth no more than that of any uninformed passerby.

Throughout the history of photography many individuals have written about photography, but very few were serious critics. I taught photography for more than fifty years and during that time I had only had one restriction during class discussion. The student was not permitted to say "I like it" or "I don't like it". Perhaps I was denying free speech, but my purpose was to indicate that taste based on uninformed opinion has little meaning in class or in critical discourse. One may enjoy a McDonald's hamburger and turn up one's nose at a meal in a three star restaurant, but that does not make one into a connoisseur of food. Students often hide behind their personal taste as a way of avoiding the problems involved in seeing and understanding the complexities involved in the art of photography. My job as a teacher was to deny them this shield. In the belief that rational

and intelligent discussion deserved more thorough information, I would ask students to look at the photograph, describe its contents, and then answer ..who, what, when, where and why. Who is the photographer? What is he or she attempting to do? When was it made? Where was it made? Why was it made? How does the photograph illustrate the philosophical point of view of the artist? What are the visual means that are used to express this viewpoint in terms of composition, focus, scale of gradation, and print color? What was the cultural milieu when the photograph was made? Who influenced the photographer in his or her development? Is the vision truly original or does it merely repeat what has gone on before? How has the photographer developed through time? For instance, why did Strand move from pictorialism to a more realist approach to photography? Who were his guides and how did this come about? Did he write about this evolution and what did he say? These are not questions that can be answered easily. They require study and research, an open mind and a keen eye. Otherwise one stoops to the level of the museum visitor who looks at Picasso's "Guernica" and says..."why any child can do that".

A friend once invited me to sit in on a class at Columbia University given by Meyer Shapiro, a much admired art historian. For two hours he discussed "The Burial at Ornans," a

painting by Courbet. It was a revelatory experience. I not only saw exactly what was going on in the painting, but came to understand the period in which it was made, Courbet's political and social ideas, the painting craft involved, and the aesthetic union of form and content. I expect photography critics to aim for the same level of expertise. What one gets from Mr. Johnston is opinion without facts. He demeans without explanation and gratuitously insults an individual recognized as one of the great photographers of the twentieth century.

Strand began to photograph in 1910 and continued until the day he died. In 1916, Stieglitz, a man of taste and discernment, brought his work to public attention with an exhibition at 291, and then devoted two issues of Camera Work to his photographs. From 1916 on, Strand worked continually, photographing in New York, New England, New Mexico, Gaspe', France, Italy, the Hebrides Islands, Egypt, Rumania, and Morocco. The work of few photographers has matched this scope. To all of this must be added his career as president of Frontier Films, the most important documentary film company of the 1930's. In his books Time in New England, La France de Profil, Il Paese, Tir A Mhurain, Living Egypt, and Ghana, An African Portrait, Strand sought to make the photographic book into a genre that combined text and image in an

aesthetically and ideologically meaningful way.

Strand's work can be seen in the permanent collections of major museums, both in this country and abroad, in traveling exhibitions; and in monographs, the most recent of which accompanied the centenary exhibit at the National Gallery. None of this background is considered or discussed in Johnston's article. Since he avoids analyzing what Strand has produced, I may be justified in suspecting that a certain kind of opportunism is at play here, for critics without a personal point of view enjoy boosting their own ego by demeaning the work of others.

What is Strand's contribution to photography? In his photograph the "White Picket Fence" made around 1915, Strand removes photography from the kind of sentimental rural landscape dear to pictorialists in order to bring it into the modern era. Using the lessons he learned at 291, where he saw the work of Picasso and Matisse, Strand took ordinary subject matter -- a white picket fence in front of a house -- and created an image not before seen. The fence is transformed into a dance-like frieze, becoming more than a utilitarian object fashioned by a local craftsman. It becomes a playful series of shapes and forms, altered by the passage of time, into "toy soldiers" in a variety of postures. The forms and shapes in the buildings in the background are so

varied, and the light so bewitching, that they play off against the bright starkness of the picket fence. There is a harmonic rapport between foreground and background, as one might find in a Mozart or Hayden quartet. From a bit of mundane reality, which one ordinarily would pass over without a second glance, Strand fashioned something new and quite magical. It is an image that brings to photography what Picasso and others were experimenting with in painting--the ability to see new meaning in old forms. The freshness and lack of sentimentality of Strand's approach influence many important twentieth-century photographers, among them Ansel Adams and Walker Evans.

In "42nd Street and Fifth Ave", another early image, Strand anticipates Bresson by some twenty five years. The forms of pedestrians scurrying about while carriages cross the busy thoroughfare are organized into a unified composition that captures not just the appearance but also the sense of the city's energy. (And all of this with slow film and a large reflex camera.) Strand's close-ups of nature demonstrate another treatment of simple subject matter. Examine the "Cobweb in the Rain", a subject available to any photographer on an early morning walk in the woods. A jewelled diadem is created out of a little dew and some leaves. Strand constantly challenges the viewer to see things ordinarily

overlooked.

The man whom Johnston so casually denigrates is the consummate explorer. To many of my generation he is, along with Cartier-Bresson, a germinal force in twentieth-century photography. And since his vision was original, his discovery of richness in nature, in people, and in the built world impelled him to transform these findings into aesthetically interesting and expressive images.

My final point concerns Johnston's opinion of Strand's craftsmanship as "downright lousy". What a silly and uninformed statement! Strand's basic philosophy was that the photograph had to be a complete work of art if it deserved to exist. It had to pass through a crucible that demanded original vision, the unity of philosophy, form, and content, realized in the techniques specific to photography. The scale of gradation of the print, (every shadow had to have substance) and its color had to be carefully considered. He never used the services of a commercial laboratory although at the end of his life, in an effort to have his photographs made more widely available (his practice earlier was to make only one or two prints from a negative), he supervised Richard Benson in printing a series of portfolios. These were always carefully marked as portfolio prints so they would not be confused with his own prints.

Strand did not use a 35mm camera

because he felt the size of the negative would not allow him to achieve the quality of print that was necessary for the expression of his idea. For his early work, he used a 3-1/4 by 4-1/4 Ensign reflex and later an 8 by 10 or a 5 by 7 view camera from which he made contact prints. Since his early printing was on platinum paper (which during one period he recoated because he felt the factory did not put enough platinum into its emulsion) only contact printing was possible, in which case he might make an enlarged negative by projection. Strand developed his negatives by inspection to be certain that the correct range of tonality had been achieved. He toned the final prints in a gold toning solution. Later, when he turned to silver prints, he experimented with different emulsion, surfaces, print colors etc. He was never satisfied with the status quo, although sometimes when he discovered materials suitable for his vision, he would find eventually that they were discontinued by the manufacturer.

What was most impressive about Strand's technique was his absolute search for perfection. Often he would return again and again to the darkroom to reprint a negative before he was satisfied that he had achieved his objective. Despite what Johnston may say, these prints have a magical quality. Looking at his early platinum prints of New York, or at the 5 by 7

platinum prints made in Mexico or at the photographs made in New England and in France, reveals (to eyes that can see) a richness and quality that is always at the service of his vision.

All of Strand's work was achieved with no commercial or market support. He simply selected subjects close to his heart and mind, and somehow found the time and money to fulfill his self-imposed assignments. As a young photographer I admired his dedication and tried to walk in his footsteps. I once asked him why he worked with so little support from galleries, museums or commercial clients. His answer was simple and to the point: "I work", he said, "because I have a need to.)

I have searched my mind and the only justification I can see for Johnston's reaction to Strand's prints may derive from an extraneous problem rather than from visual myopia. Unfortunately, museum conservators, worried by what light can do to works on paper (watercolors and ink prints) have applied the same standards to photographic prints. This is an understandable anxiety when dealing with daguerreotypes, ambrotypes and nineteenth-century silver prints on paper, but platinum and silver prints of the last fifty to sixty years are not easily harmed by light. As a result of this caution, the viewer is often literally in the dark at exhibitions of photographs. Several summers ago, an exhibition of my Haitian photographs at the Brooklyn

Museum was virtually invisible, although I had urged the museum curator to raise the light level so that my work could be properly seen. Prints on which I had spent many long hours in the darkroom were much too dark to be understood. Strand's work (and mine) are meant to be seen under a certain light level and when that is not present, the images appear dull and lifeless. (I sometimes sneak a flashlight into a museum and jokingly illuminate the photograph with its light to express my dismay at the low light level.)

I am against censorship, but I do think that editors should show some critical acumen in whom they choose to act as critics. Photography magazines have a responsibility in educating young photographers; articles on technique, for example, are sure to be scientifically correct. Shouldn't the same standard apply to critical pieces, whether on Strand or others? Perhaps several writers should have been invited into the discussion. On its own, Johnston's piece displays an aspect of uninformed "knownothingism" that is a disservice to photography and demeans the caliber of Camera & Darkroom, besides displaying the inarticulate boorishness of its author.

Walter Rosenblum

There will be a workshop from Aug. 9-16. Call or write to reserve a place.

ZONE VI

N e w s | e t t e r

Number 69, April, 1992

Resemblance reproduces the formal aspect of objects, but neglects their spirit; truth shows the spirit and substance in like perfection. He who tries to transmit the spirit by means of the formal aspect and ends by merely obtaining the outward appearance, will produce a dead thing.

Ching Hao
Notes on Brushwork
*fl. 925

When I started in commercial photography, I was willing to take any kind of work, but wanted, eventually, to specialize in architecture. My preparation consisted of going through back issues of the magazines that bought architectural pictures; *I studied the pictures they had bought.* (No use trying to sell them pictures they had not shown a preference for.)

I searched for common themes. There were obvious techniques. For example, though amateur photographers usually photograph buildings toward

*"fl." I learned, means "flourished."
Ching Hao flourished in 925. Nice.

a corner (and people from the side) I noticed that the best photographers never shot a building into a corner. And, where possible, they always photographed a building with the sunlight on its face. They seldom used backlight.

Lots of buildings were photographed at dusk. I figured out how to make them. Double exposure. I'd make the first exposure at dusk, placing the building's value low. Zone IV is good. Then I'd wait 'til dark, get someone to light up the windows and meter a lit window. I'd place the value on VIII and make the second exposure.

If you try to do it with one exposure, the lighted windows will be blocked if the exposure is sufficient for the building to show detail. If the exposure is proper for the windows, the building will be black.

In color, which has a very short range, Zone IV is fine for the first exposure, but the lighted windows should be placed no higher than Zone VI 1/2. I've made triple exposures in which the second or last one was the moon. Wait 'til it is where you want it.

Some photographers included people for scale, others didn't. I thought the pictures that did, some of which I

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found pleasing, were those of less formal structures.

But these were small tricks that anyone with average smarts, a desire to learn, and a healthy measure of fiscal desperation could easily discover. By adding hard work, good timing, decent technique and the ability to compose a picture, a person could produce admirable, saleable results.

But some of the published pictures were more than admirable; they were wonderful. The best architectural seemed to establish a mystical interaction between the subject and the viewer; the buildings almost seemed to take on personality, to be looking at you! Was there a big thing; a definable special ingredient that made a few pictures outstanding?

The most intense expression of architecture I have ever seen is in a platinum print by Paul Strand that I am lucky enough to own. It is the back of the well-photographed church at Rancho de Taos. I understand that Ansel Adams, after looking at the negative of this photograph and a few others by Strand, decided to make a career in photography rather than in music. The print is riveting.

If a powerful photograph of a building could be made occasionally, could it be done regularly? What was the trick? What could it be? I couldn't think of anything except camera position and, of course, unusual, exciting light.

Within minutes I discovered one of the most valuable techniques I have come across: I went out of my house and concentrating on it hard, walked v e r y s l o w l y across the front of it. Suddenly I reached the exact spot where it was looking at me!

You have two choices. You can mumble that this guy is really strange, or you can get up, go out, and...Try it.

Have you ever heard of "skip thinking?" It works like this: when you find something that works, you skip ahead to what else you can apply it to. Sometimes nothing. In this case, everything. Walk across in front of a chair until you find it "looking at you." How about a rock? Or a tree? Try it.

When I photographed Easter Island for Rapa Nui, I made individual "portraits" of most of the important Moai -- the stone figures. In each case, I found the one position where, though the figures are eyeless, they were "looking at me." I've photographed standing stones at Callanish and Orkney and Avebury. They have no faces, but you can still find "the spot."

The position is usually inches wide, even for a landscape. Find the spot at which interaction occurs. I find that it is almost never at an oblique angle to the subject. Look it right in the eye. There is a learning curve and I can now nail the spot in seconds. I am sure that is because I

have done it so often that I truly believe the spot exists.

This technique may or may not work for you right away. I've worked with students who can't see anything happen, even when I set up the camera for them. But they know what I'm talking about and after a day or two, they can.

An added bonus-gift is often found: compositional unity. Whether the good composition adds to the interaction or the interaction occurs, at least in part, because of the good composition, I don't know. Or care.

Though you have probably never heard of any other photographer using this technique, it has become indispensable for me. Give it a try.

In general, Find those wonderful "accidents" in your own work or the work of others that you find exciting. Study those pictures. Try to isolate common threads; the principles or elements that came into play. Then find out (by taking pictures) how you can use them to intensify your own vision.

*

It's called a Newsletter, but somehow we never have had a lot of letters. Let's try some, on the assumption that what is of interest to one may be of interest to others.

Dear Fred,

Somehow I managed to go through 60

years of life without reading "The Wind in the Willows" so, finally, about a week ago, I started. I got to the third page and found myself reading, "...suddenly he (mole) stood by the edge of a full-fed river. Never in his life had he seen a river before -- this sleek, sinuous, full-bodied animal, chasing and chuckling, gripping things with a gurgle and leaving them with a laugh, to fling itself on fresh playmates that shook themselves free, and were caught and were held again. All was a-shake and a-shiver -- glints and gleams and sparkles, rustle and swirl, chatter and bubble."

Wow! I thought, that's Fred's river! The images you have created of that lovely stream -- no matter what season -- have made it every bit as alive as Kenneth Grahame's wonderful prose. Its newest manifestation is just beautiful. Thanks so much for continuing the print series.

Dear Hal,

What a lovely letter. It's been so long since I read "The Wind.." (Putney School) that I'd forgotten its sweetness. Thanks for the reminder; Someday I'll read it again. Like Huckleberry Finn, like Moby Dick...

And I'm delighted you like the print. I guess I win -- making them -- just being out there to make them, is a wonderful experience. Somehow the final prints don't mean as much to me as the original thrill of discovering

the thing, all formed up, standing for inspection, ready for its portrait.

Most folks, Southerners for sure, wouldn't realize it, but good ice is very rare. What we need are a few below-zero nights (normal freezing temperatures won't freeze the flow of the river) but not too many or too cold or it will freeze solid, bank to bank. There will be no water showing. Then, if the ice is good, to make things even better, how about a little snow (not too much or you get marshmallows). Please have it wind-blown into wild abstract shapes (since I'm ordering from the menu). And then I'd appreciate some bright sun from a cloudless sky to add shadow forms and sunlit accents to provide brilliant prints and more compositional options.

But what happens mostly, about half way through the hoped-for sequence? It rains and washes the ice out. Or the river freezes solid and it snows two feet on it. That turns a river into a good cross country ski trail.

That's nice too, but not for picture making. When that happens, you are probably through for the year, because the next step is either more snow or warm weather and/or rain and it all goes away. There have been whole years with no photographable ice. When it comes, it doesn't last, so you drop everything and get at it. When it's perfect, I have made as many as a hundred exposures in two days. It's not like work; it's like picking

beautiful flowers.

I wish you some nice flowers during the coming year, and thanks again.

Note: I have a few vacancies in my "Print Club." (One or two custom prints a year.) If you would like information, drop me a note or call..

Dear Paul,

Thank you for your letter. I'm afraid we have no vacancies at Zone VI. Folks think this is somehow a company that makes its living taking pictures; it's a design, manufacturing and mail order operation.

As far as learning from me to be a "fine art photographer" that would be nice. I wish I could afford to be one! I sell several hundred custom prints a year plus thousands of Zone VI production prints, have published five books and two videos, have directed many workshops, and I make my living in the mail order business.

THERE IS NO SUCH BUSINESS AS FINE ART PHOTOGRAPHY. Only after you're dead can you make a decent living selling your photographic art!

Sorry if I seem abrupt, but you sound like a fine young man and I want to do you the favor of not wasting a lot of your time and money chasing something that doesn't exist. I know this is not the answer you were looking for. It is, however sadly, true.

Dear Ken,

Thank you for your nice note. I'm delighted you like the print. It is a joy to get out the work that I like best instead of the "decorative" prints that most folks pick.

India sounds exciting, but I know what you mean about the confusion and bustle and the difficulty of making good pictures. I flunked in Africa and China. Same deal. You just aren't at all prepared; you feel a sense of rush, discomfort (rich white guy with expensive camera). You're intruding, exploiting, and you are not welcome.

To do it well would take a very good photographer months, I think, to just get the feel, to find the places and faces, and when you think that you don't even have the language, the problems seem insurmountable.

Look at the way Koudelka photographs. See The Gypsies. He is a gypsy! Also who is the guy who photographed Tulsa? Larry Clark? He was a drug addict, so he too could get right in among 'em, physically, emotionally.

So, for me, I make a few snaps in foreign, peopled places to have a record. That's a very legitimate use of the camera. We don't have to make "Art" all the time! But in *unpeopled* foreign places: Iceland, Easter Island, The Hebrides, The Andes, etc. I am as much at home as in Vermont.

I imagine that's because the earth forms are consistent (different but the same). The line of the breaking

surf in Ireland is much like the shape of white water moving past a stone in Montana or Russia. And the sweep of marshy land in parts of Alaska looks like places in Labrador. Different is the same? Sure. Who said it wasn't?

Writing helps me sort things out. Thanks for giving me the chance and, if you are still on board, having the patience to read this.

Dear E.G.

"Resolution differences between view lenses, Hasselblad, and 35mm?" I wrote, "It's academic, the bigger the enlargement, the poorer the print."

When I showed my answer to Paul Horowitz, he said, "As usual, Fred, you missed the key point." Here's what he added:

"The physics of light dictates that the ability of a well-corrected and focused lens to form a sharp image (measured in, say, lines per millimeter *on the film*) is determined by the f-stop, and is independent of the focal length and film size. So a scene, photographed with a high-quality lens at f/11, say, will show detail down to approximately 100 lines per millimeter (the sharpness decreases with increasing f-number: at f/22 it's about 50 lines/mm). Thus a 35mm negative (which actually measures 24x36 mm) so exposed can record about 2400 lines across its width, whereas a 4x5 negative captures nearly 10,000. Both negatives record the same scene,

of course, if lenses with corresponding focal lengths are used (e.g. "normal" lenses of 50mm and 180mm respectively). This is one reason why the print from the larger format negative looks sharper.

The other reason is that the film itself has a similar resolution limit, also specified as some number of lines per mm, typically in the neighborhood of 50-100 lines/mm, again independent of the size of the film; following similar reasoning, the larger film captures more total image detail. If you prefer, you can think of this another way: Film grain and blemishes are less conspicuous when magnified less; the 4x5 negative requires only 1/4 the enlargement of the 35mm negative. (Hey, that's what I said!) An 8x10 print from a 4x5 negative shows the same degree of enlargement as a 2-1/2x3-1/2 print from a 35mm negative. I've noticed a related feature of prints made from large format negatives, when compared with the 35mm format - not only is visible grain eliminated, but the lumpy texture so often seen in a smooth expanse of sky or clouds is replaced by a creamy smoothness." Thanks...

*

I owe an apology and wish I could supply an explanation. The devastating verbiage I quoted in a previous Newsletter that I attributed to The British Journal of Photography did

not, according to my friend Joe Meehan, appear there. I called Harry Thompson who I had thought had sent me the item, but he said he hadn't. If you know where it came from, please let me know.

We're headed for the last roundup. This year we will wrap it up. The last workshop will be from August 9-15. I've done about sixty so it's about time to fold the tent. The staff agrees. We've had a great history together and we have every intention of going out with a bang. We'll make the last one a standout.

If you've been thinking about coming, there are still a few places left. Call or write for an application. One "student" -- he's no student any more -- is returning for his sixth workshop. Welcome back, Joe.

With best wishes,

A handwritten signature in cursive script, appearing to read "Joe".

ZONE VI

N e w s l e t t e r

Number 70, July, 1992

"If you suffer any sense
of confusion in life, the best
thing you can do is make
little forms."

Robert Frost

I received a lot of mail concerning the reference I made to "skip thinking" in the last Newsletter. And in a more general letter, Bob Powers -- who attended a workshop in 1975 -- related memories of things we discussed there. He said that many of the ideas have continued to apply, not only to photography, but to other aspects of his life and career.

He recalled; "photographic materials behave the way they behave, not the way manufacturers say they behave." And, "take it the way it wants to go 'til you ruin it, then back up. That's the only way you'll know you've gone as far as possible." And, "you can tell more about the structure of a photograph by looking at it upside down on the ground glass because you are not distracted by the details of the image."

So, if these few notions remained in his memory and were of use for seventeen years, I am encouraged to

continue along these lines. Although with some trepidation; these are opinions, not facts, and therefore subject to the opinions of others. But they've worked for me and I'll give it a try. (TRY IT?)

Please don't feel that these meanderings either do or don't apply only to photography; fit them into your life wherever they might fit, or toss them! Caveats completed.

Don't fight nature. Find out what a thing wants to do and take it the way it wants to go. The best way to cure a runaway horse is to let it run 'til it wants to stop. Then, don't let it; make it run to exhaustion. It won't do that again. If you find a paper that turns brown, don't try to make it turn black; see how brown you can make it, then use it for prints that want a warm tone.

If you find something by mistake that works, figure out a use for its peculiarity. I set a guest who wanted a workout against my woodpile. He'd slam the maul into the middle of a twelve inch chunk of maple and it would stick. He'd wrestle it out and do it again. Then he "missed" and hit the chunk four inches from the edge and a fine slab split off. It was trying to tell him to work around the edges. He didn't listen, at first.

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Investigate everything from a 180 degree position. Accept nothing, except as a springboard. Especially if it sounds like a slogan or rhymes. "Expose for the shadows, develop for the highlights." Howse about "expose for the high values (place the high value on VIII) to get the low values as far up onto the straight line as possible?" TRY IT. (T.I.)

Don't listen to anyone unless you want your work to look like hers. A workshop student called and asked if it would be helpful to study a book on composition by Feininger. I asked him if he liked Feininger's pictures. He said they were boring and stiff. Why would you want to have him show you how he does it? I get letters from people who want to be architectural or fashion or food photographers and want to know if it would be a good idea to go to a photo college to learn. Think. A good architectural or food or catalog or annual report photographer makes \$10,000.00 a day. Big names get much more and big fashion names get rock star income. So who do you expect will be teaching you at a salary of \$20,000 a year? A top notch photographer who could make that kind of money but prefers to teach and enjoys rusty old cars, back yard vacations and Burger King? Not likely.

Study the publications that are buying the work you want to do. Who was ever qualified to teach a Salgado or a Penn or a Hiro or an Avedon? They taught themselves.

"We choose to go to the moon, not because it is easy. Because it is hard."

John F. Kennedy

Photographs are made in the light, not in the dark. Don't print so much. Ansel said that twelve keepers a year was a good year and you're not Ansel. Some jerk in a recent magazine article encouraged everyone to print every negative on a roll of 35mm. without test strips, etc. As though there isn't enough trash in the world. Why not proof everything for eleven months and then, in December, see if you have twelve images worth printing?

Be different (contrary). Most "photographers" snap 35's of the kids at the beach. They call them, "Record Shots." When they are "serious" they photograph the boring, easy cliches; "The Drunk," "The Harbor." They call these, "Fine Art Shots." *Do what they do and your pictures will look like theirs.*

If you want to be a standout photographer, or anything, it's easy. (Hard.) If you leave before dawn in sub-zero weather with an 8X10 and come home in the dark with two negatives, you'll have no competition. *Do what they won't do and your pictures won't look like theirs.*

Do it the hardest way. Everyone else is diligently searching for the easiest way. Did you know that 90% of the paper sold is Greasy Kid Stuff plastic? Why? It's easy! All you have

to do is rinse out your prints (before you throw them away.) Avoid economy, light weight, rapid, ease of use, convenience. Is the hard way always the best way? Probably, but one thing you can be absolutely sure of; if you choose the hard way, you'll be all alone.

The cost of progress is trouble.
Go design and finance and construct and market a timer or a camera or a meter that works. Don't bother to patent it. Even stealing it will be too much trouble for the competition. Years ago we designed a simple fix so that people could align the lenses on Beseler enlargers. After we paid for the tooling, I offered to gave the enlarger manufacturer our suppliers' name so he could buy the part direct. People would then benefit whether or not they bought his enlarger from us. He never made the phone call... Neither Pentax (or any other manufacturer) bothered to find out how we modify meters. Or why. We not only show them how to do it, we even give them a simple, high speed procedure which proves that unmodified meters don't work and modified meters do. (Have you gotten around to the simple test -- see catalog -- to find out that your unmodified meter doesn't work?) All it takes is a roll of film and fifteen minutes and you'll know.

Never eat at a restaurant that starts with "Mr."

Always drink the good wine first.
I send out an assignment sheet to

all who apply for a workshop. It's a good starter to get their juices moving and it saves the staff the need to talk about things that don't have to be talked about. I'll reproduce it here. You might find it helpful:

Please begin the following procedures right away. Follow the directions in The Zone VI Workshop book. Exactly...

1. Personal Film Speed Test: Page 19. One film only. Tri-X and HC-110 are recommended, but not required. Mail the negatives to Zone VI Studios, Newfane, VT 05345 with a \$7.50 check to Zone VI Studios, Inc. for film speed determination. (If you have already completed your film speed test, go to step 2.)

2. After you have received your personal film speed information, complete the Development Time Test. Page 33.

3. Print eight test negatives. Page 36.

4. Make Proper Proofs of three rolls or 12 sheets of film. Use negatives from your files.

Bring to the workshop: A) The film exposed for the personal film speed test. B) The print you used to determine black (better to choose a stripe a bit too light than one too dark.) Mark the stripe you chose. C) The prints used to determine proper development time. Mark the one you chose. D) The eight prints described on page 36. E) The three Proper Proofs. F) Twelve to twenty of your

best photographs. Do not use VC or RC paper. (Ever!) Use Brilliant.

If you do it now, you will have time to correct any errors and time to become familiar with your new, solid technique. You will arrive with confidence in the mechanics; you will be on top of it and ready to go. If the Boy Scouts can "Be Prepared," so can you! Determine to have the best, neatest, most thorough, most useful set of test data of anyone attending. No matter what.

Please put all the test work in one envelope with your name on it. Bring the prints in a separate envelope or portfolio case and leave both at the desk when you register. The staff and I look forward to meeting you and sharing an exciting and rewarding workshop.

This letter has gone out to about two thousand people over the years. Many have called to ask whether it was "required" or asked if they could substitute a shortcut method of their own invention.

So you can imagine how surprised I was to receive a letter recently from a woman who said she had completed the work and wondered whether there was anything else she could learn at home. There is no limit to what she can learn at home. I've been devising methods to find out what I've needed to know for thirty years. I wrote her a letter with some ideas that she could pursue and I'll reproduce it in the next Newsletter.

For now, I would like to print a fine letter from a good friend and an outstanding photographer. Dr. Ken Hansen, though not a kid, carried thirty pounds of 4x5, tripod, holders, and lenses to 17,000 feet in the Himalayas. And then made pictures that were worth it. (See what I mean?) He is a worker, a thinker, a doer. He writes with reference to the last Newsletter in which I discussed the similarity I found in earth and water forms in different places. He agrees with me, sort of, I think, but with large reservations. I hope you find his (contrary) viewpoint as interesting and provocative as I did.

Dear Fred,

I have started to reply to your letter several times for much the same reasons that you gave for writing. I wanted to clarify my own thinking. The newsletter has galvanized me into a new attempt!

My main concern is with the idea that landscape in different parts of the world leads to the same sort of response. "Different is the same?" I have been wondering why this troubles me? I think there is a divergence in emphasis or philosophy here that I am trying to sort out.

The following passage about the isle of Iona off the coast of Scotland provides me with a point of departure. It is

taken from the published version of Kenneth Clark's TV series Civilization.

"I never come to Iona - and I used to come here almost every year when I was young - without the feeling that "some God is in this place". It isn't as awe-inspiring as some other holy places - Delphi or Assisi. But Iona gives one more than anywhere else I know a sense of peace and inner freedom. What does it? The light which floods round on every side? The lie of the land which, coming after the solemn hills of Mull, seems strangely like Greece, like Delos, even?..... Or is it the memory of those holy men who for two centuries kept western civilization alive?"

If I, standing in for Kenneth Clark, tried to photograph Iona, I would first and foremost want to convey its uniqueness. It is not even the same as the other holy places mentioned. The light is different. A gentle but directed light, with subtle differences of tone marking distance is the very essence of British water color painting, but it takes a genius like Turner to show the impossible as fact. Photographers rarely pull it off. Someone who has mastered the Sierra light at 7,000 feet and above is still a bairn when it comes to Iona. If the final print looks like California, the job has been botched: all sense of place is lost. At the same time the photograph must not look like a watercolor. It must show every blade of grass and stone with precision because every blade has been cherished and every stone carried in the dreams of those who have come on pilgrimage to the island.

What of the iconography of the photographs to be taken? There are public emblems available: a worn celtic

cross, sheep and stone walls to suggest pastoral care (Ezekiel 34:11-16), a ruin. But how is one to convey an intensely private experience -- something defined, but not defined -- in public images? It can be done. The lone croft is a standard Hebridean symbol comparable to a Japanese lone pine tree, but look what Strand did with it in Tir a'Mhurain, South Uist. (Your print hangs to the left of your big window, if I remember rightly.) The position of this cottage is totally unique and defines the place and the life about it. The light is uncertain. To live in such a place requires tenacity of spirit and unrelenting hard work. In many parts of the highlands the "clearances" drove the crofters out of the glens to emigrate or to live on the least farmable land. I do not know in what manner this happened in Uist, but for me there is a terrible sadness in this picture.

The public symbol may be a card that can only be played once. If a unique sense of place is to be achieved it is important to find graphic elements that derive from the landscape itself, usually from the distinctive geology or from the climate. Building styles and agricultural activities reflect both. To find what is graphically unique in a landscape requires time, an ability to abandon formed habits, and perhaps an uprooting, a great shock of circumstance. In an essay on Samuel Bourne, who photographed the Himalayas in India in the wet-plate days of photography, Arthur Ullman quotes Bourne's account of his 1864 expedition and comments: "In this experience on the pass, the void stared back at himcracks started to form in Bourne's concept of photography, in his sense of reality, in his world view. Finally, thousands of miles from home, months away from European influences, Bourne really began to see." Two people might find quite different elements in a

landscape: one photographer could find calligraphy, another sweeping sculptural forms, another chunky masses. The only essential is that forms be found and that they are in some way defining for the photographer. The watercolors that Cézanne did of the Bibémus quarry and near the Château Noir reveal this searching process in action: the analytical decomposition of the landscape.

In addition to the public image and such graphic elements there may be some particular feature or motif which seems central to the experience and the sense of place. The photographer need not understand why this private image is significant, only recognize its emotional power.

The above discussion began with an articulated experience of a place of pilgrimage. A controlling image is in place thus one can draw on the tradition of expressing the awe and terror of the sacred "sublime" in poetry and painting, or select from the tradition to present quiet peace -- as needed. The photographer, however, may not start with a controlling image and there need be no prior commitment to either the sublime or to the Theosophical spirituality of Kandinsky and his followers ("equivalents"). The basic metaphor of landscape is exploration. Viewers are invited into the landscape with the photographer to make their own responses. This applies to urban landscapes as much as rural. Atget's photographs of Paris are full of corners to be turned, courtyards to be entered, doorways to be opened, closed windows that conceal unknown lives. The controlling image is apprehended in the detailed process of exploration. For this reason the landscape photographer must still be specific, still obsessively pursue a sense of place. Perhaps Cézanne in his studies of Mont Sainte-Victoire provides a model.

As must be obvious, I am using Clark as a stand in. (Not entirely: my Father was passionately devoted to Iona.) The real issue for me is the photographs I have taken near my boyhood home in England on the edge of the Yorkshire Dales. There is a very complex and unique geology with Karst limestone formations capped by layers of gritty weather-resistant rocks. The Craven fault makes abrupt differences between adjacent areas. I have been using the dark channels and fissures of limestone pavements as a private symbol and the sheep farms and stone-wall patterns as public symbols and I have been trying to be true to the light as I see it. It don't come easy.

I hope this does not sound aggressively prescriptive. The "photographer" admonished is myself. It is part of an internal dialogue... responses to the questions: What have I tried to do? What have I avoided and why? Do the bits and pieces cohere into a single breathing entity?

Let's have more. I'd like serious workers to find a home here. If you have some thoughts or pictures of general interest and genuine worth, don't be bashful.

Hold up on workshop applications, please. We have reached maximum (72 souls) and have a substantial waiting list.

With best wishes,

A handwritten signature in cursive script, appearing to read "Fred Pickers". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s l e t t e r

Number 71, October, 1992

"Excuse me sir; could you tell me how to get to Carnegie Hall?"

"Practice, practice, practice."

We just completed our last workshop. We had a full house; seventy-two people were registered, and then five more just plain arrived. We banished them to the Putney Inn, but squeezed them in to the classes. It was an above-average group; very interested in pictures. The staff members sold more than 100 prints, which is a concrete indication of student appreciation of pictures.

In the last Newsletter I included a letter that was sent to all workshop applicants. It described basic tests and procedures to complete before the workshop. They included film speed test, development time test, and proper proof procedure, etc. Only about half the people attending over the years have been sufficiently motivated to do even these few simple things. So I was surprised to receive a letter, after all these years, requesting more work.

I wrote her:

Good for you. Sure there is more for you to work on. I suppose that all

I have learned about photography, and a few other things, is born of desire. If you just have to get a problem solved, it keeps gnawing on you 'til you do. Let's say you want to photograph, for example, a pepper...If, like most folks, you sort of want to photograph it, you will sort of try two or three exposures with a 35. When you see the dismal results, you decide that you really aren't all that crazy about peppers and go on to something else (at which you will also fail.) Unless you're like Edward Weston. If you are, even though you are as poor as a church mouse, you go through sheet after sheet of 8x10 film, day after day, setup after setup, "model" after model, until you get to a wonderful result. He called it, "Pepper number 30."

There are psychologists who say that ferocious concentration on one activity for a period of time can lead to a heightened sense of well-being, even to euphoria. Read Weston's "Daybooks" and see if they weren't right!

Here are a few ideas to help you get started on things you have to know if you are to run away from the pack. (To keep you going, remember that if

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you aren't the lead dog, the view never changes.)

What is really the contrast range out there?

Find out.

Get a black card and a white card and place them side by side, both in shade. Meter the black card and place the value on Zone I (the white card will fall on about IV, Believe It Or Not) and expose. Note: Both cards will be in all pictures.

Next, meter the white card and place the value on Zone VIII and expose. (The black card will fall on about IV, BION.)

Now, put both cards in sun and repeat the above.

Next step is to put the black card in shade and the white card in sun (you figure out how to do that...), meter the black card and place its value on Zone I and expose. Now reverse them; put the white card in shade and the black card in sun, place the white card on Zone VIII and expose. Develop and print all negatives (proper proof.) You will find out the most startling things; things that most people who have been at it forever don't even know they don't know. As they say, "you won't believe your eyes." But try. (What happens, happens, not what people say will happen.)

How do paper grades really work?

Make 8x10 test strip prints of a good, full range negative. Ideal would be one that has a high value all the

way across the print. A snow scene, the side of a white building, etc. would be fine. Make them on Grades 1, 2, 3, and 4 paper. Mark the backs of the prints with the grade numbers while the paper is still in the box, so you can't make a mistake. Develop, stop, and fix all four together. Now, locate the strip on the grade 1 that shows a high value that pleases you. (Can you make a snowball? Is it a cloud-like cloud?) Let's say the expressive high value appeared at 12 seconds. Write on a pad, "grade 1, 12 seconds." Look at grade 2 and find the exposure for the high value that matches your grade 1 choice, or guess an in-between. Write "grade 2, 13 1/2 seconds." Next, expose grades 3 and 4 for their appropriate times. Then develop all four prints together. If the high values don't match exactly, make the necessary exposure adjustments. Keep working until they do. *YOU MUST WIN!* That's what separates you from the also-rans. You will learn more about print quality, atmosphere, tonality, and contrast from this exercise than you imagine. Just as important as seeing the results of these exercises is to experience the excitement and the confidence that springs from the knowledge that *you can control the medium*, not the other way 'round.

Now, see how the low values reacted to the different papers. The middle values. Most important -- the atmosphere. Here's what most folks

don't know: Contrast grades are chosen by great printers for the atmosphere they create, not by some silly sensitometric matching of negative densities to paper scale. It is simple to print the same negative on grades 1 and 4 and make the grade 1 print contrastier than the 4. Just burn in the low values and dodge the high values to increase the contrast range of the 1 to make it as "contrasty" as a 4. Do the opposite with the grade 4 to make it as "soft" as a grade 1 unmanipulated print. You don't believe it? Well, perhaps you're right; I'll never tell, but you know *something* must happen if you do that. Right? Only by doing it can you find out what.

Get an N plus one-and-a-half developing time nailed down. I found a better way to do it (or to learn more graphically what's happening). My old way was to expose a white card in sun, placing it on Zone VI 1/2. Then I'd develop the negative 'til the density equaled the density of a negative exposed to Zone VIII and developed "normal."

Now I photo something real in sun (no more white cards.) Meter the high value and place it on VIII. Expose. That's your "normal." Then close down 1 1/2 stops (or place the high value on VI and 1/2 in the first place) and expose four more negatives. In the darkroom, cut a big corner off the normal negative, then put them all in the developer together. For roll film, make a "normal" and then proceed to

expose the whole role to VI and 1/2 and cut it into four parts.

Develop the normal for your normal time, then transfer it to the stop bath. Keep developing the next three negs or sections. After you have gone 25% over normal time, transfer a second negative to the stop bath. A third at 50% longer than normal time, and develop the forth for twice your normal time. Fix, wash, etc. and Proper Proof them all, including the "normal." The first one or two negs will be overfixed, but that won't change the density significantly.

Locate the plus negative in which the high values match the high values of the normal (cut corner) negative. That's your N plus one-and-a-half developing time. If you don't hit it right on the money, interpolate between two times. I think this is a better method because you see what actually is happening to the snow or white church, rather than a card and can better relate it to actual work.

Find the speed at which the eye sees. Photo a river at different shutter speeds. Use Polaroid if possible so you can compare the print with the subject on the spot. Why a river? Because it stands still while it moves and it's consistent and you have an idea of how it should look. A bicycle wheel, etc. won't be as graphic and it's harder to hold up a picture of a revolving bicycle wheel, moving car, etc against the real thing and make a judgement.

Find out the effect of various print developing times.

Expose five full size (8x10) test strip prints of a good negative on grade 2 paper. Mark the backs in pencil: 1, 1 1/2, 2, 3, 5 (minutes.) Put them all in the developer together and agitate vigorously. Develop the "1" sheet for one minute and toss it into the stop bath. Then pull the "1 1/2" at 1 1/2 minutes, etc. Fix and examine all five. Locate the exposure in each print in which the high value looks the way you want it to. They will, of course, all match.

Take out five more sheets of grade 2 8x10 paper and expose each so that when they are developed for their designated developing times, they will all match. For example, the one minute print might require 20 seconds of exposure. Write on the back, "20 sec, 1 min." The five minute print might require 10 seconds of exposure. Write on the back, "10 sec, 5 min," etc.

Put all five prints in the developer together and pull each print when its time has come. Compare...Is it true that shorter exposure and increased development increase contrast? Which print has the most brilliance? Where do you first get D-Max black? Is there a difference in apparent sharpness? How about "presence?" "Space?" Did the emulsion slide off the paper at five minutes? Is the one minute print blotchy? What else did you learn that you can use?

Now make up a chart to save time

in the future. It might read, "2 MIN DEV. = X, (X is exposure time.) 3 MIN DEV. = .75X, 1 1/2 MIN DEV. = 1.25X." (These are "for example," not actual times.) If, in the future, you expose and develop a print for your standard time, you can try longer or shorter development without making a new test strip. Now test grade 3...

Find out what tones are possible on a sheet of paper.

Cut twenty sheets of grade 2 8x10 paper into 4x5 pieces. Using any combination of exposure and/or development, make fifty evenly spaced prints from white to black. Those few who have done this are better photographers than those who haven't. Whether that's because of what they learned from doing it or because they are interested and industrious enough to do it, I don't know. I'd guess a bit of each.

Find out how filters really affect the image.

Find an outdoor subject or a portrait subject in sun or shade if that's what you want to know about, or whatever you want to know about. Make a normal exposure. (Place the high value on VIII.) Put a lens cap or hanky or hat in the middle of the foreground or in the subject's right hand, etc. as a marker. With a modified meter, meter through a filter and place the high value on VIII. Then place the filter over the lens and expose.

With an unmodified meter, the best you can do is to meter without the filter, then apply the filter factor, place the filter over the lens and expose. In both cases, make notes: "Hat in middle = yellow." Move the hat (or lens cap, etc.) to the near left corner and try an orange filter, to the right and try a green, etc. Develop all negatives normal and proper proof the negatives side-by-side. What REALLY happened? What are the effects? The tonal effects. The EMOTIONAL effects? Do filter factors work?

These are just a few starter suggestions. You may have to devise your own ways to root out whatever information and techniques are necessary if the quality of your work is to improve. Great photographers never stop experimenting, trying, shaking the cage.

Here's a rule I never break; if I can find out something myself by doing it, I do it. I don't ask anyone. To build real knowledge and confidence, to become an outstanding photographer (or violinist or dentist), knowing facts is not enough. *You have to do the work.*

WHY ARE YOU SHOWING ME YOUR CAMERA?

Because it isn't mine and it might become yours. If you are one of the furious many who think you should have won the last camera we gave away, here's another chance to either win

this one or get furious again.

Here's WHY: My friend John Willis is starting a terrific photographic project. It's called In-Sight (That's not the terrific part.) It will offer free courses at the Brattleboro Teen Center for adolescent boys and girls. Applicants will be chosen by social services and guidance counselors. All funding, equipment and supplies are being raised through donations and grants. (John already grabbed my enlarger; you'll see why I gave it up when you read the new catalog.) By the way, all contributions of money or equipment will be gratefully received and are tax deductible.

Here's HOW: Send up to six prints, black and white or color, unmounted, 8x10 or smaller, or slides. Include a check in the amount of ten dollars for each print or slide. Make the check to In-Sight and send prints and check to: Photo Contest, RR 1 Box 2652, Townshend VT 05353.

If you want your work returned, include a stamped, self-addressed envelope. Please make sure the return envelope is oversized; it's tough to get an eight inch print or cardboard into or out of an eight inch envelope.

We will handle your work with care but cannot guarantee against damage.

John Willis is a marvelous

photographer and teacher. He has been a long-time member of my workshop staff and heads the Photographic Department at Marlboro College. He has taught photography at the Boston Museum School, Princeton University, and has been active in many other programs. John will judge the pictures with two guest jurors. If you win the camera, it will be suitably inscribed and we will publish your picture in the Newsletter. Please get the pictures to John by Christmas. Good luck.

I got a lot of mail concerning the deep philosophical content of the last Newsletter. Brooks Jensen, a professional photographer from Oregon, wrote, "I read with some curiosity your "rules to photograph and live by" in the latest Newsletter. Yes, yes, yes, and yes!" Brooks sent a fat bunch of his own so we'll start the next Newsletter with some of his offerings. Here's one of mine in the mean time:

Never read the directions. I recently did and here's what I learned:

"Don't be misguided by colors. You should be careful about colors when using the (Pentax) Spotmeter V. If exposure is set strictly on the basis of a light level reading taken from a color area, there is a good possibility that the exposure will be incorrect. This is because reflectivity is different for different colors. (?) The reflectivity of yellow is lower than that of white

(huh?) but yellow has the highest reflectivity of all the colors. (!) Indigo and purple have the lowest reflectivity. Consequently, if a light level value is taken from a yellow area is set to EV index, (Standard Index), the resulting photograph is somewhat underexposed. In such cases, you can try the referential data in the table on the left according to you actual experiences." The "data" indicates that yellow reflects 65-75%, purple 6-12%, etc. Nonsense. A purple gloss paint would reflect a lot more than a purple towel, etc. (They don't know what reflect means.)

And they seem unaware of the biggest troublemakers; infrared and ultraviolet. In short, they don't know that improper exposures occur not "because reflectivity is different for different colors." *Improper exposures occur because the spectral response of film is different from the spectral response of unmodified meters.* Their's and, to be fair, everyone else's. Though they've tried to "explain" the problem (innacurately), rather than solve it, at least Pentax, as opposed to the others, knows they have a problem.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s | e t t e r

Newsletter 72, December, 1992

"Every note must be experienced."

Sibelius

The words are simple; the application --whether by composer or performer-- is difficult.

Dean Kessman attended my workshop last summer at The Putney School. His photographs were unusual, imaginative, "experienced." I asked him to submit several for a discussion.

I think this photograph is "successful." Let me tell you why:

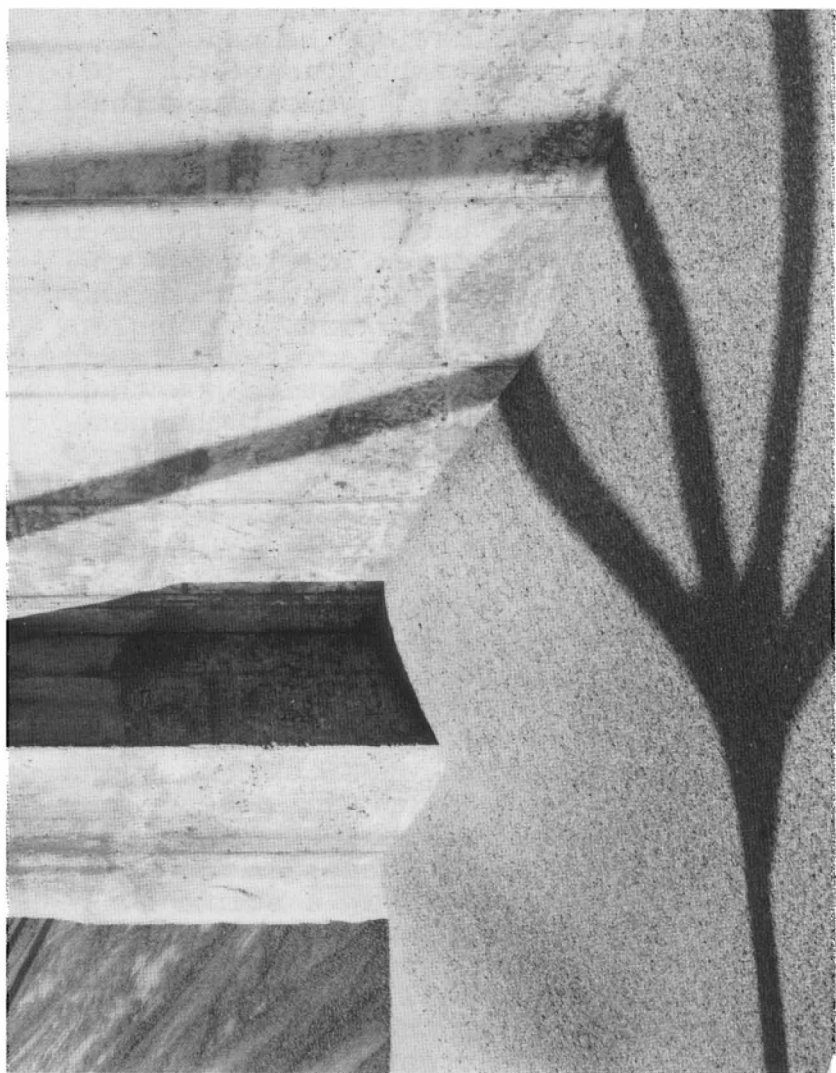
(1) It is finely crafted. Poor craftsmanship attracts attention to itself and denegrates the subject, while fine craftsmanship is an important element in any art form. From music to sculpture, a sensitive performance of the original form adds a significant measure of vitality, beauty and conviction to the worker's concept. A fine print alone, however, is not enough to make a picture worth looking at. But a careful print is, at least, a strong indication of the photographer's interest in his subject, dedication to his medium and pride in himself. Good prints are made by good photographers. The same eye,

appreciation, sensitivity, and application that are required to make a serious photograph in the first place come into play in the darkroom. Finally, excellent prints get our attention just because they are so rare.

(2) The composition and design are admirable. Here is a fine arrangement of negative and positive forms, spaces, and tonalities.

(3) There are contradictions. For example, the dominant form is not a solid form; it is a shadow. So we start right out with something unusual. The shadow grows and shrinks as it advances through the picture. It starts out with a single shaft at the left, branches quickly into four, gets cut off at the bottom into three and, by the time it climbs the wall, it is down to two. One errant "arm" breaks off at an acute angle "contradicting" the symmetry of the others. It makes you (me) think of jazz!

(4) Now look at the spaces between the shadow lines. Are those three aggressive sunlit points spearing in from the right the "real" forms or are the shadows that created them "real?"



Which are "the spaces between?" Squint and you can reverse the strengths. Remember the classic drawing of two faces in profile that can, by a stretch of imagination, be made to look like a vase? All this good, careful, seeing is, however, not the picture. It only serves to set up a baseline, a foundation, for the meatier parts of the subject.

The meatier parts are the forms in the upper left corner. Notice how the acute-angled shadow (the one climbing the wall) is at the exact same angle as the top of the shadow at the left of the concrete form. Notice how the arch formed by the shadow at the base of the concrete column forms the same arc as the arch formed at the place where the shadows branch from the original stalk. But it is facing the opposite way. It is in opposition, like this ().

Other details that add to the strength of the design are the small black stripes in the upper left. They not only "anchor" that corner, they are echoes of the larger shadow form.

(5) The central theme is contained in the progression of shapes in the upper left. From the left, in a slim, vertical, rectangular block there is the mottled dark gray of... *something*. Next, the wider brilliant sunlit column, ragged on the left, arrow-straight on the right. And finally, the smaller blunt-pointed dark shadow to the right. It is the only form of

the three to violate the rule of the rectangular shapes. It is the contrary turning point on which the photograph pivots.

(6) The biggest contradiction may well be the apparent simplicity of these clean forms contrasted with the detailed, intricate handling of their arrangement.

(7) The picture is a surprise. We have seen so many pictures that are boring and "derivative" (or outright cliches) that to see one that is unique is, at the very least, interesting. Even without the elegant "architecture" of this picture's composition and design, the imaginative handling of very ordinary subject matter is enough to make it a "second looker."

(8) There is a sense of mystery. In looking at thousands of pictures and identifying those that stretch beyond the bounds of *admirable* into the free-flight area of *wonderful*, I find that, for me, the difference is encompassed in what I think of as "otherness." How to define that for someone else is like the meaningless, "I don't know anything about art, but I know what I like." statement. But I'll try...

Great pictures are, for me, like great music; they are windows, starters (opening statements; not closing arguments.) They stimulate the

viewer to stretch, to wander outside the frame of the picture (or the composition of the music) and visit the private areas of his own invention.

Here, the middle gray area at the upper left provides the window. It throws your perception of reality open to question. Is it another wall? Does it slope away to the left? Does it extend flush with the buttress or are we looking into deep space? I can easily read the only three other substances in the picture; sand, poured concrete, and shadow. But this gray shape is made of whatever I want or can imagine it to be.

(9) There is an absence of scale that enhances the impression of mystery, of "otherness." We've all tried to figure out aerial photos that could be mistaken for microscopic images. In this picture, the photographer has given us only the sketchiest information to help us ground our assumptions concerning size. Because the walls could be any height, the only real clue is the sand. Maybe. Suppose the "sand" isn't sand at all, but one-inch stones. If it is, then standing against the wall you would be only half as tall as the wall. If it's sand, your head would be out of the picture...

(9) It is what I call a "quote out of context." In spite of the rather mundane materials and "stiff" subject

matter that he had to work with, the photographer recognized, selected, organized, edited, and presented a group of forms that are graphically and emotionally gripping.

The technique is as old as photography. The photographer carves out a specific part of the visual "real estate" at his disposal and delivers it without revealing its surroundings. And, like a quote out of context, it may (or not) be "accurate." When this technique is used sensitively, the chosen segment reflects more clearly the photographer's feelings than a more literal, more general, more "revealing" picture.

*

I thought it might be interesting to illustrate this technique with an example, so this morning I found an old building and photographed it whole to show you a lot of "visual real estate." Then I selected a small area in an effort to create a stronger, more personal, picture. Perhaps you will find the resulting "before and after" pictures revealing. (The detail would be more interesting without the overview picture which "explains" it.)

But this is about Dean's picture. How "good" do I think it is? About as good as student work gets. As I told Dean, he will hit flat spots in the future. How (or if) he gets through them will

determine the value of his future work. Nothing is "wrong" with his pictures. What will make them stronger will be more pictures, more experience, more personal growth. More living.

*

Another nice person who attended the same workshop devised a nifty computer program for editing and cataloging and ordering things. One of the things he ordered was my writings in Newsletters and he has designed a simple, thorough index. If you would like a copy, send a check --\$10.00, to: George Pappas, 611 Washington St. Suite 202, Wellesley, MA 02181. The index covers Newsletters 1 to 70 plus an update at the end of '93.

In the last Newsletter I mentioned some thought-provoking, and/or humorous, "rules to photograph and live by" sent to me by Brooks Jensen of Portland, OR. Here are a few choice ones:

Some things just can't be photographed. Trying to do so anyway is worthwhile. -Photographers are more scared of people than people are of photographers. -A lazy photographer dies before he makes many pictures. -The best people make the best photographs. *Morley Baer*. -If you are even the least bit tempted, make the photograph now! The subject will not be the same later. -90% of all

photographs can be improved by getting closer to the subject. Telephoto lenses are not the answer. -A full 30% of your best photographs will be lucky accidents. (For me, it's 80%.) -It is impossible to make a good photograph with uranium salt toning, Kodalith, or RC paper. -Workshops and/or instructors can be addictive and can take up valuable time that is better spent on photography. -Whoever first makes a sturdy, durable and functional tripod will retire very rich. (That one is wrong...) -A good photograph is never "about light." Good photographs are about feelings. -Any photographer worth his salt has 10,000 bad negatives under his belt. -(I must be all salt.) -Never ask a person who collects cameras if you can see his photographs. (Ditto for those whose old cameras look new.) -We are fast approaching critical mass on photographs of nudes on a sand dune, sand dunes with no nudes, Yosemite, weathered barns, the church at Taos, lacy waterfalls, fields of cut hay in the afternoon sun, abandoned houses, crashing waves, sunsets in color, and reflected peaks in a mountain lake. (What's so good about lighthouses, ferns, ducks, and drunks in doorways?) -In the cosmic scale of things, photography is not that important.

Here's a few (more) I'll sneak in: Never ask anyone who has never bought a print to show you his work. -Never trust anyone with two middle initials. -When you come to a fork in



the road, take it. -And one that, as the years slip by, I increasingly hope is true: Age and treachery will overcome youth and skill. -And, finally, the key to everything: Never don't pay attention.

I was thinking about the eighty percent of my best pictures that I said were "happy accidents." I'd like to revise that figure. It's one hundred percent! Think about, for example, a portrait. One of my best is of Patricia Neal. (See the monograph, Fred Picker.) I made a dozen negatives and each was ordinary except one which was wonderful. Suppose her expression and position and the light for wonderful hadn't all come together for a half second during the half hour we spent together? Suppose that I was sneezing or changing holders at that moment?

Landscape is dictated by everything. Where you are when the light is great or the shadows are positioned just so or whether you are "on" that day. (No one is at her best all the time.) Two favorite landscapes of mine contain single horses. Supposed I'd arrived on those scenes when they had been in the barn? Suppose one hadn't been white against a black cliff? Suppose they were affectionate and crowded up to me for an apple? Suppose it got dark before they moved into a good spot or provided a broadside rather than the traditional view of a horse? I'd have

made no exposures. Strand's "Tir a Muhrain," the most wonderful landscape photograph I've ever seen, depends among a dozen factors, on the position and appearance of *four* horses! A billion-to-one shot!

Sure, you have to be able to see and compose and get it right technically and, most important, be out there, but if you aren't lucky, great pictures won't happen. Have faith. Working hard eventually levels the field. Note: "Working" is a big-lie word to impress the folks at home. Fishermen "work" a stream. *Sure* they do... Anyway, I've gone many whole days --yesterday was one, as a matter of fact-- "working" from sun-up to last light and ending up empty. Not one negative, not even a setup.

But I'll get even; one day soon the West River will freeze, except for ribbons of slick black water. A light snow will sugar the ice and a soft breeze will shape it into forms never seen before. The sun will blaze f/32 and I'll get six wild abstract negatives in the first two hours. It will be as easy as picking flowers and they will be as beautiful as Brahms chamber music.

I wish you that kind of luck in everything you do, during the Holidays and through the coming year.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s | e t t e r

Newsletter 73, March, 1993

"Practice and thought might
gradually forge many an art."

Virgil [Publius Virgilius]
70-19 B.C.

I wrote a letter to a fine
photographer from Texas in response to
an interesting article about his
handling of VC paper. His name is Joe
Englander. He conducts an exciting
workshop program. You can contact him
at, Workshops in the West, P.O.Box
1261, Manchaca, TX 78652.

Dear Joe (if I may,)

I just finished reading your article
in View Camera referring to the
printing techniques you employ for
Variable Contrast paper. As far as I
know, no one other than you has come
up with any well-devised *method* for
getting the best out of VC. I thought
it was terrific.

I do some printing on VC paper
from time to time; on freezered DuPont
Varigam, of which I still have 500
sheets or so, and I agree that for
some negatives, the ability to print
more than one grade is a big help. The
Varigam is in a class with Brilliant,
though the character is different.

Ansel printed extensively on Varilour, Varigam, and Polycontrast Rapid, so the quality was surely on a par with the fine graded papers he used; Cykora, Kodabromide, Ilfomar, and Velour Black come to mind.

I also agree with you: "When everything comes together and a negative prints perfectly on a graded paper like Galerie, nothing can touch the quality of the print or the pleasure of printing it." That's true, but is it because of the inherent superiority of today's graded papers? If an "as good" VC were around, would the graded result still be superior? Maybe... I'm not sure whether the options available with VC might not give the ordinary printer too many possibilities. He might end up in confusion with an inferior print. But if it was as good and he used it like a graded paper (just put in a #2 or #3 filter and went at it) wouldn't the results be the same?

As a seller of Zone VI Cold Lights, including a new one for VC, I've had to be concerned with how cold lights work (or don't) with VC. As you say, the addition of the generally-recommended CC40Y to get cold lights to tungsten color (so that a #2 filter will work as a #2, etc.) steals a lot

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of light. When you then add the appropriate contrast filter... curtains! Using a cold light phosphor that is close to tungsten color (W-31) makes it a slow printer on graded paper...

To help the speed problem, what we recommended before the new VC head, which contains separately-controlled soft and hard light grids and uses no filters, was use of the "wrong" single contrast filter for cold lights. We suggested finding out if a 1 1/2 or a 1 or a zero gives what you would think of as a grade 2 print. If it does, you don't need the CC; you just use a 1 filter to get a grade 2 print. The problem with that method occurs if you are down to a zero filter as a standard and there's no room left for a super-contrasty neg. But I believe that happens infrequently because VC papers are generally on the soft side and contrast ranges, excluding backlight, are generally a lot shorter than most folks think (or color film would never work.) And in a real emergency, you can use a zero AND a #1 and/or go to dilute or 2-solution developer, etc.

We're both experienced printers and know what we want, so I'm sure that though we might interpret a subject differently (and, to paraphrase Ansel, end up with different performances from the same score), we'd end up with the print we want. But what interested me most about your article, because I've been

messing with the same thing, is the possibility of developing a consistent printing method that is an efficient (fast), and controllable way to get to a finished print using VC.

As I said, I do little VC printing (though Zone VI is working on a VC paper and I've spent a lot of time experimenting with various test emulsions) so I would like your opinion or suggestions on a method I've been working on. It's not effective past the pilot print stage (basic contrast and density) but it is perhaps a start.

Note: I have also been using only hard and soft filters.

With graded paper, I always first locate, by test strip, the exposure for the high values on the paper I guess will be the proper grade. Then I make a print exposed for the proper high values. Then, if necessary, I change paper grades and start over, to find the grade in which the low values also and/or the "atmosphere" of the print seems right. I've enclosed a video showing this approach. It's not rocket science, but viewers tell me it helps them get a handle on an understandable procedure and some consistency.

So for VC, I naturally began with the soft filter to nail the high values. But I found that the subsequent addition of the high contrast exposure (I like your "black printer" nomenclature) darkened the whole print including, surprisingly,

the high values. I don't know if you have this situation, but I had to go back to locate new shorter exposures to lighten the print. I tried to figure a way to get both contrast and density where I wanted them directly.

When I get stuck, my procedure is to try the opposite. So I tried a black printer test strip first. When I identified the exposure for the black printer (let's call it 10 seconds) I exposed a sheet for ten with the black printer, but left it in the easel. Then I changed to the soft filter and ran a test strip on top of the black printer exposure and developed. Say the strip that looked good was five seconds of soft on top of the ten of black.

Then I exposed a whole print for ten black followed by five soft and had a look.

I found that the blacks stayed close to where they were; the soft seemed to have little effect on them. Whether that's sensitometrically or emotionally so, I'm not sure. But the highest values stayed where the high value test strip showed they'd be. Why would 10 seconds of hard followed by 5 of soft make a different print than 5 soft followed by 10 hard? The best I could come up with is that the soft printer breaks the exposure threshold all over the paper making it receptive to the smallest increment of exposure from the black printer. But, as your illustration clearly shows, the effect of the black printer alone, in

negative densities above V or VI is zero. Because the hard light doesn't break the threshold in the high value areas, the soft printer works on "unexposed" paper.

It works OK in the highest values, but the middle values that barely show in the black printer exposure are exposed above threshold so the soft printer produces a darker result in those areas than the hard printer alone. At that point, I've lost control. In general, depending on the negative and the importance, size, etc. of the grey areas, I've found the tendency to disturb the middle values is more bothersome than the soft printer's effect on the lowest values.

This is still pretty much in the realm of theory and a long way from home and it only pertains to the pilot print! How a procedure for efficiently determining the contrast needed for areas of the print for subsequent burning and how to list them and whether they should be split exposures with hard and soft filters or a single grade filter or what...Lord, it's a lot more complicated than printing on graded paper where you don't have all those options! I haven't begun to tackle the burning-in time and contrast question.

I don't know if I'll ever be able to get a whole method nailed down that gives the predictable results I feel I can get with graded paper.

In the old days, I, like most people used VC like a graded paper.

I'd set my Codelite to a #2 or #3 grade and print away. I don't think anyone has ever gotten a complete handle on an efficient system for the use of VC to its fullest potential, but no one has come closer than you. I find the problem is intriguing. Because VC offers not only infinite basic contrasts, but a variety of contrasts in various parts of the image, the creative possibilities are great. I'd be delighted to swap ideas, theories, concepts, impressions, notions, and musings on ways to efficiently exploit its potential.

With best wishes,

*

Dear Joe,

Thanks for your prompt and helpful reply. And thanks for the pictures. They all looked very fine, but the Aspens in the rain was especially appealing to me. Super-keeper!

You are correct in that most VC heads "leak" a little light of the other color, even when it is shut down. The problem may be, in part, because they use a single rheostat for both bulbs, so neither gets completely shut off.

I took a page from the Codelite, which I've had since '70. It leaves little room for improvement, except that without stabilization, it was all over the lot. It uses two dimmers and, to make sure you got it OFF, it has an on-off switch for each light. So does

the Zone VI.

Here's a rock-reducer-flasher idea. (He wrote about burning in hot areas with a soft light exposure.) A little bitty flashlight with all but a tiny area of the bulb painted over. You shine it on the rock either while you are enlarging or use a red filter under the lens and take your time. Works pretty well. I set up using a shielding card over the printing paper; get the flashlight to the right height and position, then shut off the enlarger light, pull the card, and flash ahead. Because the flashing idea is always used to "quiet" a bright or contrasty area, perhaps a yellow filter gel over the flashlight would be useful, though flash light is pretty yellow as is.

I like the idea of your quilted test strip, though I haven't yet had a chance to try it. It would seem to offer more options than my way and it saves a step. Note: the way Joe proceeds is with a test strip made vertically using the hard light. Then another group of strips is made horizontally using the soft light. The object is to create a square in which the contrast and the density look correct. You would then know, for example, that 12 seconds of soft and eight seconds of hard, etc. would match the chosen square.

And now, a word from our sponsor! After a couple of years of fussing, testing, specifying, re-designing, and

cussing, we arrived at a final version of a Zone VI Brilliant VC paper. It's a match for Varigam, which we used for comparison, except that the tone is cooler and the character is more like Brilliant. It has a range from softer than Brilliant Grade 1 to the same as Brilliant Grade 4 and it tones the same as graded Brilliant. It is fiber-based and double weight. I like it a lot. The only way you will know if you will like it is to try it.

Because we expect to sell about 7.5 times more than Brilliant Graded (that's the ratio by which VC papers outsell Graded papers) we were able to buy, with Calumet, the big quantities that offer significant savings. I'll list the prices here. If you want to try VC, give us a call. (802) 257-5161. It's in stock now.

25	sheets,	8x10.....	\$15.00
100	"	" 48.00
50	"	11x14.....	46.00
25	"	16x20.....	48.00

*

There was a useful column in the Sunday New York Times about a month ago. John Durniak interviewed the proprietors of Professional Camera Repair Service, (37 West 47th Street, New York City). The gentlemen, Rick Rankin and Herb Zimmerman have taken over the operation from Marty Forscher. They gave Durniak some tips that I didn't know about: They said

that dirt is the major problem with cameras; it gets in everything and everywhere, but not while the camera is in use. When you open it to change film, that's the time to be especially careful. Even a bit of dust or grain of sand will mess things up. (When our cameras get cranky, it's always from dirt in the focusing gears or tracks.) When it's bad, they wash out the grease and dirt stuck to the inside of the (hand) camera. If it's very bad, or impossible to reach, they disassemble and give the parts a sonic bath.

They advise carrying a can of air to use for preventive purposes. That's one I didn't know; I figured it would blow dust in and was always nervous it would belch shaving cream onto my lens. Salt water we all know about. You don't have to splash it on; you just have to be near it. Wipe everything; tripods, etc. with a rag dampened in fresh water at the end of the day.

Batteries get sluggish in cold weather; carry your meter in an inside pocket. For flash, a separate power pack is the best idea; you can carry it under your coat. Watch for battery terminals and/or the contacts corroding. Polish them off with an eraser. They suggest carrying the one that looks like a pencil; the regular typewriter eraser.

Before storage for more than a few weeks, remove the batteries. Listen; if your camera is making a funny

noise, something is wrong; have it checked out.

"The lens should be dusted with a small brush, like an artist's brush, or anything soft to get the dirt and loose particles off the lens. If you want to wipe the lens, it should be moistened before it is touched." They recommend Kodak Lens Cleaner or water with a tiny bit of detergent. If you have nothing else handy, breathe on the lens to get vapor on it before wiping. "One of the things that drives me up the wall," Mr. Rankin said, "is a photographer taking his tie or shirt-tail and wiping the front lens element." He says to use a Kleenex.

*

We get an occasional query about view camera lenses and flash. Yes, all modern large-format lenses have flash contacts. Because of the leaf shutters, they synchronize at any speed, so set your lens at its highest speed to minimize movement or "ghosts."

In spite of using the same equipment two hundred days a year, and owning fancy flash meters, and testing each setup with Polaroid of the same speed as their transparency material, studio photographers always bracket. Plenty. A five-shot bracket, 1/3 stop apart, is normal. They know that getting the shot is what counts. Can't they visualize? Yes and no. So many subjective-artistic factors come into play that one time you or the client

will choose the "brighter" transparency. For the next subject, a deep dramatic rendering at the lower end might be preferred.

They are pros; they know you have to see it. The requirement, to see it, throws open the accepted mystique of precise previsualization to question. I've made a lot of negatives and given it a lot of thought and in the next Newsletter, I'm going to question it!

We've had many requests for workshop information for the coming year. Last summer we decided to wrap it up and no workshop will be held this year. But someone said, "never say never" and the staff is restless. We might reconsider for the summer of '94. If enough people show interest so we don't have to go through the drill of mailings, that might be an encouragement. If you think you would be interested, drop me a line and I'll notify you when-if. There are many fine workshops for this year; a top one on the West Coast is Bruce Barnbaum's, Box 1791, Granite Falls, WA 98252. His all-star cast includes Jerry Uelsmann and Jay Dusard.

I have a few spots open in my print club. If you would like an application form, let me know.

With best wishes,

A handwritten signature in cursive script, reading "Fred Picker". The signature is fluid and expressive, with a large, sweeping "F" and a stylized "P".

ZONE VI

N e w s | e t t e r

Number 74, June 1993

"Life is hard. It's even
harder if you're stupid."

My Dad, I think

The two pictures were obviously phony. A dozen people spotted the gaffe and called me to point it out.

One of the pictures showed a normal print of a sun-lit tree in front of a shadowed wall. The lighting range was normal. The caption said that the wall was placed on III and the "highlights" fell on X and the negative was developed N-2. Hog wash. The wall appeared as a clearly detailed, fully-textured V. N-2 would have reduced the wall density to Zone II, at best, but there is no way you can dodge a II negative density up to a V print value without creating mush. Even if you could sneak your dodger among the dozen branches of the tree that stood in front of the wall.

The second print, which the caption said was from a Maximum Printable Density negative, showed the same scene in high contrast. How placing the high value on VIII creates high contrast was not explained.

Howard Bond, the author of "*Zone System Simplification?*" in a recent issue of *Darkroom Techniques* used the

bogus pictures to illustrate the failure of my Maximum Printable Density approach to exposure. He was, he said, "dismayed by thoughts of all the problems in store for photographers inexperienced enough to follow such bad advice."

When I brought the obvious errors of fact to the attention of the editor of the magazine, his response was only, "Howard Bond is not a liar."

Before responding to the magazine, I wrote Bond to give him an opportunity to submit his "evidence." (The two negatives that supposedly made those prints.) He declined. I knew from the start what he did; he had one negative and he printed it on grade 2 and then on grade 4 to prove his point.

Subsequently, I saw an almost exact replica, same light and all, of the same cliché' subject in *Camera and Darkroom*, April. It was richly detailed in both high and low values and the tones were almost identical to Bond's "good" picture. It was in color, which has a range of six-and-a-half Zones... No minus development was necessary, or possible.

I sent the editor of the magazine this proof positive of the "error" that Bond had made, but have had no response.

Bond again: "If the SBR (subject

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brightness range) is less than normal, (MPD will cause) shadow values (to) fall on Zones that are too high, yielding a flat, dense negative that may make adequate print contrast unattainable." Wrong again. First, if the high value is on VIII, the negative won't be "dense." And, second, the "shadows" (low values, he means) will be as far up on the straight line as possible. The low values will then have the *most* separation possible. (When they are low on the toe, they're "flat.") Getting the low values up on to the straight line for maximum separation (he calls it "print contrast") is the ONLY reason for MPD.

He said that failure to meter more extensively (than MPD requires) and not employing the traditional placement of the low values (he keeps calling them "shadows") and developing for the high values (he calls them "highlights," but they never are) led to a "point and shoot technique" that "means missing a lot of exciting images."

MPD invented itself. It is the result of thousands of negatives. I use it because I NEVER want to "miss an exciting image." When you place the high value on VIII (or place the high value on VI-and-a-half and develop to VIII) you are filling up the negative with all the printing options it can possibly hold.

The reason I didn't mention minus development times is simple. It never comes up. Those pictures that require it are always lousy because they are of

unphotogenic subjects! In the very few outdoor situations where reduced contrast is needed, (I can't name one) it is easily handled by grade 1 paper and/or Selectol Soft or diluted print developer. Together, they will give you about a minus 2 (mush) effect. A simple test will show it's better to have the separation in the negative and the option to soften it in the print than to have a mushy negative that can't be separated in the print. Note: my method of making a backup N plus 1 1/2 negative for most pictures has created a pleasant bonus. Many superb prints have been made using the contrasty negative with grade 1 paper. The separation in the negative combined with the silvery softness of the paper produces some marvelous effects. Try it.

There are millions of pictures that prove that moderate contrast ranges are normal in nature: Color film works fine from the Everglades to the top of Everest to the moon because the average outdoor scene rarely exceeds six zones. Unless backlight is permitted to rear its ugly head.

Light is light and I've found it consistent, dependable, and well within the range of color film everywhere. From the clarity of Easter Island to the brilliant reflectances of snow and sand and polished rock in Iceland, Vermont, California, the Rockies, it's all the same. In Africa, Greece, Italy, and France, in heat and cold and in the occasional gloom of the Hebrides, it's the same. It may be a stop or two

brighter and there may be another Zone of difference between low and high values (of the same subject) in the high mountains than in the smog of a city. But there is no mysterious difference because of subject or locale.

I carry a plastic point-and-shoot 35mm camera with color film to record fishing trips, and even in the blinding clarity of Russia above the arctic circle, where I am returning for the third time this June, it easily encompasses the extreme range. Even on the moon where no atmosphere at all gives increased contrast, color film covers the range. Black and white materials, which give us at least two more zones of range, plus darkroom controls, there is never a problem with excess contrast.

The quality of much of the writing in the camera magazines is the journalistic equivalent of root canal. Bond, whose ethics are such that they permit the manufacture of evidence, lectured a friend of mine who had written him pointing out the errors of fact in his article: Bond replied (regarding his unmasking of my "bad advice") "I come from a family of teachers in which the obligation of a teacher to supply his students with full and accurate information is seen as an almost sacred duty." Pompous twit.

*

But even a blind hog occasionally unearths a truffle, and Bond did come

up with something useful. He provided an introduction to a subject I've been wanting to discuss. He wrote, "This procedure (MPD) totally ignores the heart of the Zone System, including planning print values before exposure of the negative."

Yup, MPD is a mechanical exposure and development procedure different and simpler than Ansel's method. Part of the difference between my approach and Ansel's or Minor White's is not technical; it has to do with the aspect of previsualization that is, supposedly, an artistic part of image-making. There is a general agreement among Zone-folks that somehow the seeing or the experience or the impression of the subject is weakened by failure to "plan print values before exposure of the negative." Ansel made previsualization of the print in tonal values an important part of the Zone system and Minor White elevated it to religion.

I did too, at first. (See Zone VI Workshop.) I placed the value I insisted on and metered the other values and filled in the form (which I designed) and figured out the development. But I don't "previsualize" in that way any more. And not (only) because I'm contrary or because doing it takes time and interrupts the aesthetic experience by inserting technical considerations at just the wrong moment. I quit "previsualizing" because it simply doesn't work. (Stick with me, I can prove it.)

I've abandoned the accepted method of placing and noting each value, then "exposing for the shadows," etc. because the field placements, so marvelously conceived, so carefully studied, so precisely placed, are always discarded when it's time to make a print! Why? Because the sensitive photographer realizes that the "pure" values of the pilot print (proper proof on grade 2 paper) which factually express the sensitometric result of the field placements and subsequent development almost never express his personal goals.

Others will take exception to my simplification of a procedure that has been elevated to a Zen-like experience, a procedure that they can spend a workshop week "exploring." (Both sensitometrically and psychologically.) But I know what I know. From thousands of hard-earned, well-studied negatives I have learned what really happens. To me, to you.

Ready? The creative part in the making of a serious photograph is contained in the finding of a subject that moves the photographer, placing the camera for maximum effect, framing the heart of it, timing the exposure, and last (and least demanding) getting what you aimed at onto the film so that an easily-printable negative will result. What the negative should be is a technically excellent matrix for printing. It does not have to be a profound personal experience. It does not have to (and never does) make the

most expressive straight print possible on grade 2 paper.

Field previsualization is never followed in the darkroom! Every sensitive photographer, including Ansel, Minor White, Strand, after looking at his negative, proof, or pilot print invariably proceeded to second-guess -- radically -- his original visualization. He changed paper grades, (Ansel used lots of grade 4) lightened or darkened the sky or the flesh tones and grossly (and properly) distorted the originally previsualized values until the print became the dramatic expression of the subject. Hell, while professing "purity," they even doctored the negatives! An interview with Beaumont Newhall in *Photographer's Forum*, May 1993: JB (Judith Bell): The negative was sacred.

BN: Oh yes. You see this whole business about *don't touch the negative* is just so full of exceptions it almost becomes laughable. Paul Strand supposedly had this very strict feeling about the purity of the image. When Stieglitz first published his work in *Camera Work* in 1916 and 1917 he called his work "brutally direct, pure and devoid of trickery." I remember a wonderful profile on Strand that appeared in the *New Yorker*, and the writer recounted that he was discussing this "purity of the image" with Strand, and Strand laughed, saying, "I don't mind changing a few things now and then. Now take this view looking down from the

courthouse in New York City. If there are too many people, I cut this one right out in the darkroom and no one knows it. I've always thought you could do anything in photography so long as you can get away with it."

Even Ansel always knew that the negative was only a "matrix for printing." Didn't he say that the negative was the score and the print the performance? He never felt obliged to stick to his original previsualization; he performed what he *prefelt*! Later prints from the same negative are often huge departures from any serious photographer's earlier efforts. And why not? Writers edit again and again, composers write and re-write endlessly, musicians interpret a score much differently when they are fifty-two than when they were thirty-two.

Let's say you (or me or Ansel) visualized a value as Zone V in the field, and liked that idea. But after seeing the pilot print decided it should be a print value III or VI so he, you, me, changed the paper grade and/or burned it in or dodged it, and in addition, we lightened or darkened the sky two print values and then burned all the edges to concentrate the composition. What happened to the original visualization and the traditional "place, fall, and develop to"? It got thoroughly re-visualized in response to the artistic demands of the photographer and the necessities of the subject. Properly. Getting there is

what counts.

I manipulate print values all the time. (See my "Printing" video.) The printer's job is to produce a convincing, exciting, beautiful result that reflects his interest in, or impression of, or involvement with the subject.

So if you're good, you recreate in the darkroom what you felt. To do that you don't need a negative that is an out-of-body experience. What you do need is a nice fat friendly negative filled to the brim (Zone VIII) with all the information it can hold so that you can enjoy the luxury of picking and choosing among its densities. You need a negative of Maximum Printable Density.

Am I saying previsualization is invalid? No. Obviously, everyone visualizes the final result. A child aims a camera at a puppy and assumes that a picture of a puppy will result. But he has little idea of the exact tones the print will have or whether the resulting picture will be "good." Neither do you, neither do I.

Need more proof? If, as Ansel said (and I believe it to be true) that twelve good photographs a year is a fine result, why did he, you, me, make a thousand exposures last year? The great 35mm photographers make many thousands. Why did we waste all that time and film? Because we simply didn't know. We only knew we would get a puppy, and though we had a better idea than the child what the print values would be (and even how we could change

them in the darkroom) we *didn't know whether the picture would be wonderful*. Why didn't we know if you and me and Ansel are such hot visualizers? Because, regardless of the extent of our expertise, the subtleties of light and the incredible continuous tone of the image go far beyond our ability to imagine. Because the things we photograph are ethereal and persnickety and won't hold still. Because we don't have the ability to understand the profound emotional effects that occur when a three dimensional subject originally seen in color is transformed into a two-dimensional object depicted in shades of gray. *We have to see it.*

Walter Rosenblum was kind enough to send me an article prior to its publication. It concerns printing and I would like to include several paragraphs that clarify the importance of the expressive print:

He states that neither Cartier Bresson nor Salgado, both extremely gifted, make their own prints. "I am sure these photographers supervise their printers, but I do not believe that one who is unfamiliar with what was photographed, with the conditions under which the photograph was made, and with the felt comment that the photographer intended, can produce a satisfactory print. When you visit an exhibition (by either) the original vision often is quite remarkable, but the prints themselves are lifeless.... There is one print scale, one surface, one tone color and the art of printing,

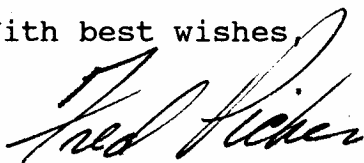
which was so significant to a Strand or Stieglitz, is ignored entirely. In truth, such photographs have value only on the printed page."

*

Nice news for Zone VI 4x5 and 8x10 camera owners. For a limited time, Rob and Sura Steinberg, makers of the only machine-coated platinum/palladium paper offer you a free sampler kit; paper, developer, clear, manual; all that's needed. If you own a Zone VI camera, write The Palladio Company, Zone VI Camera Offer, PO Box 28, Cambridge, MA 02140-0001. Include your name, UPS address, phone number and the model, serial number and approximate date purchased. He'll ship in four weeks. Future camera buyers will receive a certificate exchangeable for the kit with their new camera.

Our apologies to those who got a sticker on their last catalog telling them to buy something or be excommunicated. The mailing house, in combination with our computer program, pilot error, and possible Act of God caused the messup. No Newsletter subscriber or current buyer should have gotten it. Please ignore, and thank you for your kind support.

With best wishes,

A handwritten signature in cursive script, appearing to read "Fred Fisher". The signature is fluid and stylized, with a large loop at the end.

ZONE VI

N e w s | e t t e r

Number 75, Sept. 1993

Old woods and deep. At one time in the world there were woods that no one owned and these were like them. He passed a windfelled poplar on the mountainside that held aloft in the grip of its roots two stones the size of fieldwagons, great tablets on which was writ only a tale of vanished seas with ancient shells in cameo and fishes etched in lime.

Child of God
Cormac McCarthy

The above may be only tangentially appropriate to a photographic Newsletter, but I found it so clear, so beautiful, so similar to the marvelous Norman McLean sentence in *A River Runs Through It*, that I thought you would enjoy it. *Child of God* is a fine book, but McCarthy has written an even better one; *All the Pretty Horses*.

Some time ago I read a fascinating description of a great photographer's history written by a great printer. Richard Benson was Strand's right hand and his printer during the final days. Chip's memories

of Strand, his work, and his philosophy add greatly to the body of knowledge that, to me, is the most exciting aspect of art: how an artist feels about his life and his work and how he goes about presenting both. (They are one.)

Richard Benson

Print Making

The fundamental problem any artist faces in regard to craft is that it must be largely ignored. This seems to be an extreme statement, but it is surely true. Today we are experiencing a revival of sorts of non-silver, or alternative, systems for photographic printing, and the field is littered with well-executed, poorly conceived photographs. It seems to me that this has happened because all these photographers, or printers, are more interested in how they print their pictures than in what these pictures might be about.

If we look at the two classic early portraits of Paul Strand, both by Stieglitz, we see two aspects of the man. In one he sports an apron and rolled-up shirtsleeves, and, we are told, he is at work helping Steiglitz at 291. The picture is every bit the working craftsman in his attire--one can imagine him to be a direct spiritual descendant of William Morris. The rough jacket (something one could not conceivably work in), holding a cigarette at just the right expressive angle, looking at the photographer with the slight disinterest that only a true artist could aspire to. Something has changed, and I believe it is that Paul Strand has decided that he wasn't really interested in the physical making of photographs, but rather was an artist obsessed with his vision above all else. To me, this is a genuine choice of direction that has

made Strand potentially great as well as keeping him from being one more of those boring pictorial photographers who populated the years between the wars.

This choice of role must be understood if we are to consider Strand's craft. The decades-old idea of Paul Strand the great printer practicing techniques of unparalleled refinement is simply not accurate. His craft remained in a strongly secondary position, and he had the intelligence to keep it there. I feel that the reason Strand the craftsman looms as such a dominating figure in photography stems from three factors. The first is that Strand didn't know what to say when a fuss was made about his prints, since he truly didn't care about them simply as prints but saw them rather as visual means to an expressive end. If someone misunderstands one's work as an artist, then the easiest recourse is for the artist simply to say nothing, and if this misunderstanding is about some imagined inaccessible greatness, than silence only reinforces the impression. The second, and much the most important factor, is that this photographer knew with absolutely no confusion how he wished to distort the literal transcription of the lens into the picture that was his art. As he grew into his maturity as a photographer, his knowledge led to a simplifying tendency that he carried out with long lenses and dark prints, often made with astonishing casualness of craft but remarkable clarity of purpose. The appearance of his prints, resulting from this clear idea, seemed to the audience to stem from some magic craft, and his darkroom work became something that could be focused on and talked about. His great beginning, those 11 x 14 inch prints made from tiny hand-held camera negatives, showed the grit of working-class life clothed in the sweetness of platinum's pictorial scale. These pictures, thought by many to be his finest work, posed the question so clearly--what is more important, the blind eyes or the tonal quality of the print? There is no contest, and the eyes have it. Already, here at his very beginnings, Strand turns the tables. Platinum, so seductive and rich, was used because it obscured fine detail, or

the lack of it, and so made the message of the thing seen much clearer in his pictures.

Throughout his life, Strand used uncommon materials because they suited his purposes best; this third factor is what we must now look at as we examine his craft. Paul Strand's work has a very interesting physical chronology. He started working before the First World War using a small camera and printed this work in enlarged form by making inter-negatives and using platinum as his medium. Platinum paper is a material of very low sensitivity, and it consequently cannot be printed in an enlarger. To surmount this difficulty, photographers have traditionally made enlarged copy negatives and printed these by contact. Following this period Strand adopted two cameras, the 8 x 10 inch view camera and the 5 x 7 inch Graflex, and he used these two machines, without variation or exception, from roughly 1920 almost to 1960. This is an astonishingly long period, and it is even more remarkable when we realize that during this time he contact printed exclusively until the 1950s when his eyes began to fail quite badly. Another interesting aspect of this body of work is that Strand always used a Graflex on a tripod to make instantaneous exposures. He put a mask on the camera back and the ground glass to alter the format to approximately 5 x 6 inches, which he felt, like 8 x 10 inches, to possess the "right" proportion for a picture. This camera, now a 5 x 6 rather than a 5 x 7, used one lens only, a 12-inch Goerz Dagor. This lens length was necessary to allow the reflex mirror to clear the rear of the lens, and it forced the photographer to work with a focal length that was absurdly long by today's standards. This lens was so long that any picture made with it had a distinctly compressed structure, similar to that created by a mild telephoto lens.

As Strand entered old age he continued to use these two cameras but also began to work with a roll-film machine which made a square negative which he usually cropped to the "right" proportion while enlarging. The enlargements were in the vicinity of 11 x 14 inches--virtually the same size as his very earliest enlarged platinum prints.

There was a period during the 1960s and 1970s when Strand made enlarged prints from new negatives as well as from earlier ones. These were from Graflex or new roll-film negatives, because he had no enlarger that could hold an 8 x 10 inch piece of film. These prints, while in many cases very fine do not, in my eyes, measure up to his earlier work. It is essential to remember that Strand, although quite old and almost blind, was driven to work. He not only labored on new versions of the old but also on new pictures as well. During this time he did a long series on the garden which I feel contains some of his strongest pictures.

What this chronology tells us is that his whole working life was technologically quite simple. It appears even more so when we realize that when Strand used platinum, he never coated the paper himself, and when he used silver paper, only one was his favorite for forty years (Kodak Illustrator's Special). All Strand's fuss about photographic paper was simply trying to find a replacement for this one when it was no longer made. Perhaps this simplicity of craft is an essential characteristic of the great artist--surely in photography all the best work has been done with the simplest means

The early large prints Strand made are either on platinum paper or on an obscure material called Satista made by the Platinotype company. Both of these materials are contact speed, and both use the sensitivity of iron salts as their basis. These early prints were left in their natural matte condition--that is to say that they were not altered, after the print was processed, by varnishing or waxing. When Strand moved out of this stage in his work and began using the 8 x 10 inch and the 5 x 6 inch cameras and printing entirely by contact, he still used platinum but in an entirely different way. The new prints were hard-edged and brutally clear, but dark and full of tone. Although his earliest prints were often soft and even light in value, the pictures of New Mexico and Mexico were almost massive in their description of the subject. These platinum prints were also invariably varnished to make their surface more transparent.

This practice, a horror to the conservator, is one that Strand clung to for his entire career, with the sole exception of those earliest enlarged platinum and Satista prints. If the print was platinum it was varnished to make it shine with almost the luster of a gloss silver print, and if the print was chosen to be in silver it was made on a semi-matte surface so that this too could be treated afterwards to induce just the right sheen.

Photographic papers have always been made in different surfaces, with the idea that some were more suited to certain subjects than others. The most common has been gloss paper, and Strand detested this surface. He had similar feelings about any fully matte paper because this material was incapable of describing a strong black--the backbone of his visual vocabulary. Between these extremes, though, existed many semi-matte papers, often with an artificial grain of one sort or another. These Strand used exclusively, often cherishing a box of paper which showed this grain less than usual. These papers he varnished or waxed once dried, using different materials but always seeking to achieve a surface slightly more diffuse than the gloss papers. The obsessiveness of this desire on his part becomes clear when we realize that all of his books were made by badgering the printer to put varnish in the ink, and even the great Mexican gravure portfolio was sprayed with a lacquer after the prints were pulled and dried. Throughout all the years of his long working life only one ideal surface was imagined, and he used anything at hand to achieve it.

Photographs of the New Mexico landscape, some of New England nature forms, and pictures made in Mexico appeared as wonderful platinum prints through the 1920s and 1930s. Photographs made on the Gaspé Peninsula, however, were usually printed in silver. When Strand made the bulk of the pictures for *Time in New England* he was leaving platinum and using silver exclusively. Perhaps this happened because the paper was no longer made, or maybe it was simply because the light of the Southwest was consonant with platinum and the gloom of New England suited gaslight. Whatever the case,

Paul Strand's work settled into clearly seen, perfectly exposed negatives and straightforward contact prints made in the darkroom. I have often wondered if there wasn't a light meter lurking around in there somewhere, as these negatives seem all to be made on some perfectly illuminated day, with just the right exposure. However they were done, these great negatives were certainly printed in the most straightforward manner possible.

He used any high-energy developer available but was willing to make up a soft amidol-based one if the picture demanded it. There was hardly any dodging and burning--maybe a bit of additional exposure was given along one edge, or a little help was given to a bright sky, but this was minimal. Strand would not hesitate to pull a print out of the developer early, nor would he have had any reservations about using a little bleach to pop the highlights up if the print was a bit too deep. It seemed that a printing session would often yield about three good prints from a given negative, each quite different from the others. Whether yanked, bleached, on this paper or that, all these prints were toned after they were fixed.

I don't know when the toning started, but it seemed to have been a constant in his habits as a silver printer. The toner used was almost always one based on gold, called Nelson's Gold Toner, or Kodak toner T-21 which are the same. Toning affected the prints in three ways: the blacks became deeper, the color of the silver image was altered, and the surface became slightly less matte. The slight alteration of print surface was probably a result of the toner being used hot (I recall Strand wondering if the temperature actually did this or if he just imagined the change). The strength of the black parts of the picture was extremely critical, and both the toning and varnishing were controls used to make this precise. The print color of many of the papers Strand used, and certainly of Illustrator's, was warm with a greenish cast. A slight bit of toning cooled this off; more toning moved the print to purple, then to brown, and then even to red. All of these are subtle casts, not extremes of color, and many

shifted to the less colorful when the print was dry-mounted. Strand paid a great deal of attention to color but had no rigid feeling about what color suited what subject. He knew absolutely what color each picture should have.

Strand's darkroom was not elaborate. The sink was small, there was no timer; there was no idea that things had to be under control chemically or even that there was any right way to do things. When an enlarger finally crept into the darkroom, dodging and burning started to happen regularly. The light source in an enlarger is seldom even, and dodging and burning are necessary to correct slight problems in the negatives which are exaggerated by the uneven lighting. Strand kept careful darkroom records on his negative envelopes of the paper and developer used, the time of exposure, and any manipulations carried out. Toward the end of his life he often made contact prints using the enlarger as a light source instead of using a simple bulb held above the contact frame. This practice caused a lot of extra work because the inherent unevenness of the enlarger affected the contact print. When his sight was less good Strand began regularly to put a red dye on the less dense portions of his negatives, those areas that described shadow information. This helped slightly while enlarging but really had little effect on the pictures.

Paul Strand produced a series of books and one portfolio of pictures in photogravure as well as his long life's work from the darkroom. The portfolio, made by the craftsmen of the Photogravure and Color Company in Manhattan, was a magnificently printed series of pictures from Mexico. The gravure plates were etched from film positives Strand made himself after his frustration with poor proofs from positives the printers had made. This was a radical thing to do--it was virtually unheard of for a photographer to intrude on the secret craft of the professional printer. For whatever reason (probably because this intrusion set up real tension and rivalry) this gravure portfolio is, to me, without question the supreme example of the transformation of a

photographer's work into ink and paper. The printing is breathtaking in its depth of tone and clarity, the etching of the entire series of plates is better than I have ever seen elsewhere in even a single print, and the whole group of gravures fits effortlessly into Strand's body of work. On top of all this, the Mexican portfolio is the swan song of hand gravure; it represents the practical end of the gravure tradition, and it is clearly the peak of it as well.

Strand's books were usually printed in rotogravure, the mechanized rotary beast that hand gravure became. With the exception of the first, *Time in New England*, which is in spare and gritty letterpress, and his last books in photo-offset, Strand chose to work with gravure because it rendered such a strong tonal scale. *La France de Profil* is, to my mind, along with *The Decisive Moment*, one of the two most beautifully printed photographic books (a close third is the first edition of Robert Frank's *The Americans*). After this great beginning, the trial of finding a superb printer made it harder each time to get the quality that was always in Strand's mind, and by the time of the book on Egypt only the rough residue of gravure's glory is visible. No matter how hard the job, Strand labored not only badgering the printers but also being downright difficult, trying to get books that had some connection to his prints. When gravure was no longer available and Strand had to work with offset printers, he sought out Sid Rapoport of New York, a technically radical printer, who not only worked with more imagination than anyone else but also seemed willing to put up with this crusty and opinionated old man. At the very end of his life Strand talked more about his books than his prints, and he really believed the books to be his great achievement.

I was staggered to realize how little Strand cared about craft, and even how little he knew about it. Surely he had chosen to forget all those bits I was so convinced were vital. I must admit that my time with Strand was at the very end of his life, and so perhaps my view was distorted. Maybe I had the great luxury of knowing him when there was

absolutely no confusion left in his mind about what matters and what doesn't. Whatever the case, I learned to keep it simple in the dark, do as much as you can with the lights on, and never forget that we are making a picture and not a print. This is the lesson from him to me about craft in photography.

c. Richard Benson, Reproduced with permission from PAUL STRAND: ESSAYS ON HIS LIFE AND WORK, Aperture, NY 1990.

*

If you have seen my "photographing" Video, you will surely remember the place I referred to as "Point Lobos East." I've told no one where it is; overexposure would ruin it and it would become as boring as The White House Ruin, ghost town Bodie, El Cap and the endless parade of sand dunes. On my last visit, I found another photographer there. She had a 4x5 (Zone VI, matter of fact). She was looking down and moving around. Both good (bad for me) signs...

But several clues encouraged me. Because the subject matter is so complicated, a neophyte has no chance to get anything strong in one visit and the way she was wrestling with her tripod showed massive neophytism. In addition, her license plates were from out of state. She probably wouldn't be back.

Had she asked, I'd have advised her to position the tripod to take the desired picture (except for the *original* decision on the "desired picture," this is the *really* hard part!) Kick the front tripod leg forward toward the center of the area

to be photographed and rest some weight on it. Spread the back legs plenty as you swing left and right (pivot on the front leg) to aim the lens at the desired area. The lens should be on the same axis as the front leg. If you hate to see busted cameras as much as we do, make sure that the legs are well spread.

If you're on soft ground (and using a Zone VI tripod) adjust the leg cord snugly. Then step on the foot pads one by one. This will serve two purposes; it will drive the spikes into the ground and it will also spread the legs a bit more, placing extra tension on the cord. Each leg then stiffens the others.

If on rock or concrete, there are always cracks or fissures to work with. Snug the cord, then with your foot, pry one leg outward to bow it which puts tension on the cord.

Get under the cloth and see whether you are in exactly the spot you want. (The odds are the same as winning the trifecta.) Finding the exact spot is in the realm of art and no formula will suffice. But here's a maneuver, a no-brainer that will get you started. I've never heard or read about this method, but I've never, in memory, made a picture without using it. Please don't confuse simple with dumb until you TRY IT. It works wonders.

Ready? Pan the camera left and right *strongly* to make absolutely sure you have clearly seen all the good stuff. Don't be surprised if thirty degrees off the original axis you hear yourself say WOW. Now pan up and down.

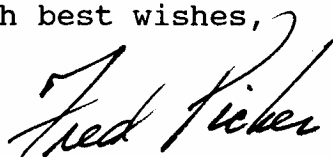
Same deal. When you get there you'll know. You will have located the northeast-southwest "property lines." Also, you are now aiming in the right direction (or you will have decided to move the camera and start over). One foot is on a rock.

The next foot to get planted is framing. You will either want more "real estate" -- subject area -- in the picture or less. To include more, it is almost always better to change lenses (to wider angle) than to move back. To include less, it is almost always better to move forward than to change to a longer lens. Never back up if you can help it.

Intellectualizing to death this deceptively naive approach or deciding whether it is valid or asking someone else's opinion of it are all time-tested methods guaranteed to save you the bother of even trying it. Not trying it will also make you an honorary member of the majority.

If you actually do it, however, profound differences in your work will begin to emerge. You will find that the growing intensity of your photographs (the result of working; trying things most others haven't the industry or the interest to explore) will enable you, like me, to find comfort during those occasional moments when you feel isolated by your membership in the minority.

With best wishes,

A handwritten signature in cursive script, reading "Fred Ficker". The signature is written in dark ink and is positioned below the typed text "With best wishes,".

ZONE VI

N e w s | e t t e r

Number 76, Dec. 1993

It was a moon-shining night,
and you could put the moon on
them. You didn't need no
headlight. If the moon was over
here, you'd just walk around, and
you'd put the moon behind the
coon. And when you shoot, you
shoot right at the moon...I don't
care what part of the tree he's
in, you can get the moon on him.
Put the coon in the moon, then
you shoot at the moon and kill
the coon.

*You Live and Learn.
Then You Die and
Forget It All*

William Ferris

This is from a book subtitled,
"Ray Lum's tales of horses, mules and
men." It's a real prize, funny and
wise and it will keep you up 'til all
hours. The reason I quoted the above
section is because it seems so closely
related to the way an experienced
photographer lines up his camera. I
love to position the camera just so to
place the reflection of a branch or
the sun on an exact spot in a still
pool or a sheet of glass. Shiny
surfaces that are not sufficiently

reflective to act as a mirror can also, through careful camera placement, produce glare.

I made a photograph of a church in Iceland which included a varnished dark wood door. There was a distant white cross in the scene. Though the cross was in direct sun, I was able to position the camera along the "glare angle" so that the sun reflecting from the dark door sent more light to the lens than the brilliant white cross did. So if someone asks what Zone a dark door would or should be on, the answer is, "it depends." In this instance the glare from the door was placed on Zone VIII and IX and the white cross fell on Zone VII. That's a neat trick, maybe, but did it improve the picture? That's the object of the exercise, after all. I think it did; I think that most of the time anything I can do to avoid the obvious by finding something unusual to photograph or some camera position that's unique or engineer an optical illusion or confusion that will create some sort of surprise, it helps. A visual hook with which to force a second look is often to the advantage of the picture. I try to remember Strand's Rule; "Don't be boring."

In the last Newsletter I

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described the panning technique I use after I have placed the camera. I swing left and right and up and down to make sure that something exciting or some unusual relationship outside of the originally conceived picture area does not escape. I mentioned that I had not read or heard of others doing this, but William McEwen of Arlington, Texas wrote, "Doesn't everyone do this? Enclosed is a relevant quote from the great photographer Michael A. Smith."

James Enyeart wrote, "For an exhibition in 1978 he (Smith) wrote the following statement which encompasses the whole of his work and invokes at the same time the unique spirit and historical limitation of the medium."

I find looking at a large ground glass to be an exhilarating experience. On the ground glass, as I move the camera around, the world comes and goes flattening itself into pictures. Wondrous transformations often occur -- small details can appear as landscapes and vast landscapes are sometimes diminished. On the ground glass everything is potentially equal.

I wasn't sure that I understood, "on the ground glass everything is potentially equal," so I first made a picture exactly as my subject originally appeared on the groundglass. (Picture 1) Then I panned about in an effort to improve the picture.

(Picture 2)

Picture 2 is, to me, a stronger rendition of the subject. It was made on the same vertical axis as Picture 1 but the camera was pointed downwards. The tripod height and position was the same for both pictures. The curved dark form is complete and becomes the central theme of the picture. It ties the elements together. Though I tried a left and right swing, the areas outside the frame shown were chaotic.

Picture 2 is better than 1, but there is an element in 2 which I find very disturbing. Look (try to avoid looking) at the light rock at the upper left. Cover it with your thumb and you will see that without the rock the sweep of the large dark form is cleaner and stronger. "Why didn't you remove the rock?" sez you. I tried, but it wasn't just lying there; it was attached to the rest of the world. Removing it by cropping the top of the picture is not the answer. As usual, cropping destroys everything. Any time I ever tried cropping to strengthen a composition, I've made the picture worse. I believe that's because if you didn't see it well in the first place, it will always be a mongrel.

And there is no way to burn in the rock without showing a black halo around it. The only way I can think of to quiet it down is to Spottone it after the print is dry. Better, but still the picture is not a keeper; it was made only to demonstrate technique and not with serious intent. And The

Camera Always Knows...

But I try to learn something from every picture, even if it's no good. Here you can see the effects of two developing times on the same subject in the same light (contrast) conditions. You can clearly see the difference between a normal developed negative and a normal plus one-and-a-half. Notice that in spite of what many photo writers would regard as a high contrast lighting situation, it really isn't. The opposite is true and the plus negative is, as is very often the case, the better one for this type of picture.

"Rules" such as low contrast paper for high contrast subjects notwithstanding, the desired print contrast (atmosphere) should always be determined by the nature of the subject and the emotional qualities the photographer wishes to convey. For example, though I usually find that the more abstract in feeling or form a scene or object appears, the more likely it is that it will appear stronger, more "abstract" when rendered in higher than normal contrast. That's not a "rule;" just something to consider.

You have to try things yourself to find out if what you think or hear or read is true because most of us photo writers don't know what the hell we're talking about. Everything I've learned about photography, and a few other things, I've found out by going to work and finding out what happens.

I get a discouraging number of calls and letters indicating how lazy many people are. They want short cuts. "Describe to me how to spot a print." No. Grab a brush and Spottone and a scrap print and work on it for an hour or two. "How long do I tone?" Tone one print two minutes, one five, one ten. LOOK, and you will know. Don't ask what filters do unless you want the wrong answer. Go to work. Take pictures with all your filters, take notes, compare and see. Don't be surprised if some filters have little effect on some subjects. But don't ask me which. Found first hand, the way I did. Second hand knowledge is worth what you pay for it.

Keep an open mind; make your own decisions even when they are in opposition to accepted dogma. Like everyone, I dreamed of photoing wild animals in Africa. But I soon found that, to me, prey (grazing) animals are not very exciting in pictures; to me, they aren't visually any stronger than goats. Have you noticed that some animals are not very photogenic? Deer aren't. Sheep in certain scenes, are. Why? Cows no, horses yes. To me, There is no animal to match the horse for glory and magnificence, sensuality and elegance, grace and a sense of history. I suspect that the success of Western films around the world is in no small part the result of the emotional pull of the horse.

I'm intrigued that, though the

camera is a "machine," the quality of the pictures it produces is totally dependent upon the emotional involvement of the photographer at the moment of exposure. An example: A photograph just sold for a new record price. Four Hundred Thousand Dollars. It was of a subject easily available to everyone. It's a picture of the hands of a woman wielding needle and thread. The hands belonged to Georgia O'Keefe, the photograph was made by her husband, Alfred Stieglitz. It is magnificent. Is it worth that much money? Of course, if the buyer (anonymous) loved it and had the money, what else could he buy as wonderful? ("I wonder what the vintners buy one half so precious as the stuff they sell.")

What makes this and the relatively few other marvelous pictures happen at all is at once simple and terribly complicated. The simple part is the skill, the photographic know-how of the photographer. Thousands of amateur photographers working today have at least the technical skill of a Stieglitz. Most commercial photographers display far more sophisticated techniques than Stieglitz knew and all have better equipment. Including computer imaging! But what Stieglitz brought to the party was his taste, his eyes, and his heart.

D.H. Lawrence wrote, "A picture lives with the life you put into it. If you put no life into it -- no

thrill, no concentration of delight or exaltation of visual discovery -- then the picture is dead, no matter how much thorough and scientific work is put into it."

It is amazing that I, and I'm sure many others experienced at teaching photography, can easily spot those pictures made when the student was truly moved. I always envied the economical (for him!) way Brett Weston "critiqued" student work. He would zip through a student's stack of prints placing each in one of two piles. The smaller pile was the "yes" pile and sometimes there was no smaller pile! That was his critique. No conversation, no nonsense about You should have cropped a little off the right or This should be on grade three paper or The print is too big or too dark. All that was important to him was the degree of the photographer's involvement and its contribution to the strength of the resulting photograph. Though most wanted "rules" or specifics, some of the students, after reviewing both piles, got the message.

I received maybe a dozen letters asking my opinion regarding Brett's burning of his negatives. The writers all thought it was awful. I think that if Brett or anyone else decides to get drunk or marry Tammy Fay Baker or wear a bow tie or burn his negatives, that's his business and it's OK with me.

But there are some things leaders

shouldn't do. In the June issue of Petersen's Photographic there was an article that was misleading and might encourage someone to buy a lens for a purpose for which it would not work. I've wasted much time unteaching people who get poor information from the magazines. The students have wasted even more time trying to make inaccurate advice work. So I wrote a letter to the editor. They wouldn't publish it. But I will!

The article showed two pictures of a sport car which the writer said had six hundred horsepower (I didn't believe that either.) He said the pictures were made from the same camera position with a short and a long lens. I wrote the editor:

Reference Gary Bernstein's "Lens Tricks" in the current issue.

1) "The photos were taken on a suburban street lined with hedges and trees." Wrong. The photos were obviously taken on two suburban streets. One street is lined with hedges, has a masonry wall, one tree and some sky (Photo A). Photo B's street has many trees, no wall, no hedge, and no sky.

2) "The camera was set on a tripod to keep camera position a constant." Wrong. Times three. In Photo B the camera was 1. Lowered (note the increased space between the drivers side mirror and the fender), 2. moved farther away, (the flattened perspective proves it. With the longer lens he

also had to back up just to fit the car into the frame), and 3. The camera was also moved to the left (note that the rear wheel rim can be seen only in Photo B).

3) "For example, a head-and-shoulders portrait subject with flat features could be enhanced (huh?) by selecting a shorter portrait-length lens -- say, an 80mm (or even a 50mm), rather than a 135mm short telephoto." Wrong. If you merely change the focal length nothing will happen to the features at all. *To effect a change in perspective, you must move the camera, the subject, or both.*

4) "Perhaps the most dramatic difference between the images is the "apparent" change in camera angle caused by the longer lens selection." "Apparent," nothing! How could there be a change in "camera angle" (whatever that is) without a change in camera position? Bernstein very obviously changed not only the camera position relative to the car, he did it in two different locations.

The two pictures that were in the Newsletter (enclosed) were made specifically to illustrate the point. (I enclosed Newsletter 27 which contained two pictures made with different lenses from the same camera position. The pictures are identical except that the wide angle one shows more subject area.) As further proof,

I enclose three pictures which appear on pages 12 and 13 of the Zone VI catalog which prove the point again.

And if that isn't convincing, I enclose pages 103 and 104 of *The Camera*, Ansel Adams, which shows and tells again what I have been showing and telling: Ansel wrote, "*The visual relationships are exactly the same as in A, since the camera has not moved.* (Emphasis is mine.) The size of the fountain in relation to the building behind it is identical in both photographs."

Tell Mr. Bernstein that "Lens Tricks" don't exist. Tell him that I would be delighted to come to California at my expense and at his convenience to watch him recreate the two photos in *Lens Tricks* utilizing only a simple change of focal lengths as described in his article. (The car and the camera stay put and on the same street, also as he described.) If he can do it, I'll sign over the deed to a completely restored 1790 house, barn, fully equipped Zone VI darkroom, etc. all on 200 upland acres in the prettiest setting in Vermont. If he can't, he has to A. promise not to write any more misleading articles -- beginning photographers have troubles enough -- and B. watch me drive home in his itty bitty auto. Fair?

I sent this letter to Mr. Bernstein in hopes he would take me up on my free house offer. He phoned and

said that he had made a "mistake." No bet. Darn, I always wanted one of those 600 horsepower Portias.

I just got a call from Chip Benson who was delighted to tell me that I didn't know anything; he had just received our Compensating Enlarging Timer and found it far more useful than I thought it was. He joyously informed me that, when making a color print (I've never made one) new exposure tests had always been required after adding or changing filtration. No longer. Now when he adds, subtracts, or changes filters, the compensating capability of the timer makes the new proper exposure adjustment automatically. He says the savings in time, chemicals, and paper are significant. Sell your Kodak stock. And enjoy a happy and healthy new year.

All best,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned below the typed text "All best,".

ZONE VI

N e w s | e t t e r

Newsletter 77, April, 1994

Dear Fred,

I've enjoyed the inspirational and thought-provoking quotes you start your Newsletters with and I thought I'd send along one I found particularly insightful. It's from the book, "Disturbing the Peace" which is an interview between Victor Havel and Karel Hvizdala. Havel is a playwright who was carried into the presidency of the Czech Republic. He had this to say about art:

I think that every genuine work of art has some mystery in it, though this may be only in its structure, in the secret of its composition, the touch, the clash, the lack of clash, among the forms, in the mystery of those structural events. Every work of art points somewhere beyond itself; it transcends itself and its author; it creates a special force field around itself that moves the human mind and the human nervous system in a way that its author could scarcely have planned ahead of time. It is impossible to number the rays that emanate from it, and no one can see where they end. They grow weaker, of course, but they carry on to infinity.

Dear Stephen,

BRAVO. Havel's words are what I've

been trying to say for years (with references to "otherness," etc.) Havel KNOWS. "...every genuine work of art has some mystery in it..." What I find amazing is the public's meek acceptance of the unprintable density of photo critics, writers, art critics, music critics, (to say nothing of the guys who write for Photo Mags) to recognize that the effect of a work on the viewer-listener is ALL that counts. They reduce the whole into pieces simple enough for them to understand so they can decide whether a work is "good." (The magazine guys, who clearly aren't oriented to pictures, are forced to decide just by noting whether the equipment used was good!) When is the last time you read a review in which the critic said, "It moved me"?

Many photographers close doors; their pictures tell a simplistic tale and they think a "fine print" will transform a pretty thing or a mundane vision into something profound. They create no "second lookers." What you see at first is all you are going to get. Unimaginative, they milk the same tired "photogenic" themes that everyone else does. "Name" places; Canyon de Chelly, Mono Lake, sand dunes 'til you scream, Arches

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Monument, Bodie (hokey ghost town) Yosemite everything, and good old dependable Zabriskie Point. There is even a white log in Yosemite on the other side of a stream that I've seen a half dozen pictures of! (Must be across from a convenient parking spot.) They haven't noticed that it's not photogenic; the depth of field required means a small stop and corresponding slow shutter speed. The resultant print is afflicted with that gauzy cotton candy goo that is supposed to represent water.

Others try to bamboozle the viewer with unintelligible nonsense, usually created by cutting up or computerizing mediocre snaps. The insecure viewer is afraid to say, "I don't get it."

Gallery guys, whose eyes stay glued to the bottom line, must sell new "avant garde" high-priced work. (They've no choice; there isn't enough old high-priced work around.) They must convince the public that new, different, obscure, and strange are synonyms for profound. I think a Warhol or a Starn twin or a Witkin work can exist successfully only in a world that is unfamiliar with or Atget or Strand. (If you don't know that The Eroica Symphony exists, Hickory Dickory Dock and all the ones about hound dogs won't seem all that bad.) We're living in a culture in which the term "rap artist" has become part of the language. That should make you think!

The great photographers go about

their work and some of it has that elusive quality that can open doors to let the imagination of the (sensitive) viewer soar beyond the borders of the print or the end of the performance. The knowledge that this kind of mystery can be created is sufficient to keep the serious ones in gear.

It can happen; I heard Pablo Casals play a *Bach Suite for Unaccompanied Cello* at Marlboro 20 years ago. When he finished, there was no applause. Either no one could move or no one wanted to break the spell. After a while, eight hundred people just went home.

Havel is marvelous, and so are the Czechs; imagine a country that would elect an artist to be president! You bet I'll use the quote.

Here's one in exchange. It's on a simpler level, but not bad; "There are so many ways to ruin a poem that it's quite amazing good ones ever get written." Berryman (don't know who she/he is, and not in Bartlett's)

Many thanks

Dear Robin,

Thank you for your kind letter. The knowledge that I have been a participant in your enjoyment of photography is gratifying.

But what a hard assignment you have given me! How can I suggest to you, "how I might spend the rest of the time to the best effect on the theme I have chosen." I'll poke at it a

little, but please realize that specific recommendations to answer a general question are tough.

I can only tell you a few of the things that I do. (We are more or less interested in the same end result.) First, I get out there. It's work. Most photographers accomplish so little because they do so little. If they don't like photographing enough to work at it not only will their images be weak, they won't have enough of them to permit the ruthless editing that excellence requires. (Remember the old one about the food not being very good and there wasn't enough of it?)

When out there, cruisin fer snaps, I try to be completely free, like a leaf in a stream. I try to let the earth and the weather and whim and sounds and my mood and the light and my instincts guide me where they will. If something whispers, "go down that road" no matter how quietly, I go. If something shows promise, but I can't make it happen, I make notes: "Something here, (I list the location or mark my map) but I don't get it. Try in snow?"

I try to stay alert for triggering metaphors for things that interest or excite me. When vision and music combine in your head there is definitely something going on. To me, small, bubbly brooks are Haydn chamber works while the big river in Russia where I fish for salmon is definitely Sibelius. So is Iceland. Weston in The

Daybooks wrote, "when I can feel a Bach Fugue in my work..."

I realize that my vision and response can change and grow, so I try to stay alert. There was an amazing picture in my barn, ready to be made, set up for years, and I looked at it every time I sharpened my chain saw or searched for a shovel. And I never saw it, until finally. It is one of the strangest, strongest, most surreal, pictures I've ever made. (Plate 81 in *Fred Picker Monograph*.) Had I been rejecting it subconsciously because it was not "photogenic?" (It was so "deep" that the f/stop required was 64-355mm lens on an 8x10- and so dark in the barn that the exposure time ran well over an hour.) Or did I just fail to respond to it metaphorically until I was ready to do so? How many other fine things have I not been ready to see? Often I am out photographing and I feel there is a picture here and I can't get it together. I go back another time and it might come easy and sure. Or not. Why?

I completely ignore the eventual viewer of what I am about to photograph. If he/she likes it or doesn't, it's all the same to me. What do they know? I've had photo editors and college instructors in my living room where there are, among other works, five vintage Westons and six Strands. Most of them never even got up to look. (What they want to see is the darkroom...) One's only utterance was, "Where do you get your frames?"

Did you know that during the last twenty years of his life Glenn Gould refused to play concerts? He only made recordings; audiences annoyed him.

I try to ignore the camera, the cold or the mosquitoes. I try to cut to the most direct communication with the subject that I can. Penetration is the word that constantly comes to mind. It's very hard. Often the strain of making a photograph leaves me dizzy, sweaty.

Do you remember the reference to the photographer Michael A. Smith in the last Newsletter? Well, someone showed the Newsletter to him and he was kind enough to contact me. He sent me an exquisite book of his clean and powerful work. And a lovely letter. There was a passage in the book that illustrates the point I've been discussing: "I take emotional response as a given in the creative process and I just try to make the best picture I can. When I work, I'm not looking for anything. I am just looking. The world has more to teach me than I have to teach the world, so I try to let whatever it is I am photographing work on me. That leads me to discovery and it is where my personal growth occurs."

In his letter Michael answered a question I posed in the last Newsletter. He had referred to "potentially equal" areas in his images. His letter explained that it means that every square millimeter of picture space is as important as any other. "Mountains and the bushes in the

foreground, or rocks and the spaces between them." That's quite interesting; I remember writing in an earlier Newsletter something to the effect that "every square millimeter of negative must pay its way."

I use, consistently, a pared-down technique and a short list of simple straightforward tools and dependable materials in which I have complete confidence. *Solve technique*. The great photographers kept it simple. Getting the picture is all they cared about.

Make a lot of pictures. Great portrait photographers with great subjects may make three hundred exposures in a controlled (studio) environment in order to get one picture. They don't know which is the one until they see the prints. No one can previsualize the nuances, no matter what you've heard. You photograph with hope and view most of the results with despair. (Except for beginners; they love everything they do!) The more proofs you have to view, the better the chance of finding a keeper. And the more you have to view, the more work you have done, the more practice you will have had, the better you are getting, etc. I know that many will disagree with me; that their idea of a real pro is one who belts a home run every time he/she pulls the trigger. But the person who can do that hasn't checked in yet. Well, maybe Atget...

You must be different if you want your work to be.

If you truly love it, it isn't work. Nor will you need "outside inspiration," encouragement, or applause. If you truly love it, you won't have a choice; you will have a rage to photograph and nothing will stop you.

★

Our VC filter set is designed to work with cold light heads. With it, the cold light works accurately for VC paper. Ours is not the same set generally available and sold by the paper manufacturers; those sets are designed for the warmer tungsten heads.

The way VC papers work is simple; the warmer (yellow-orange) the light, the softer the print. Whether the light source itself starts off more or less yellow doesn't matter because tungsten bulbs become yellower with age. They also change color depending on darkroom temperature, line voltage changes, etc. Papers change also, and one maker's grade 3, with a certain filter, will be another maker's grade 2. Papers are persnickety. Age reduces contrast. The emulsion batches are within tolerances that can wander 1/3 of a grade within the same brand. So it is not unusual if the #3 filter you used for a certain negative last year requires a change to #4 or #2 1/2 this year. In other words, some experimenting is required to get the result you want. To get there quickly; make a

print on graded 2 and try filters 'til you match it. The filter that does the job is your #2, regardless of its number. Different exposure times for different filters are normal. Depending on the character of the negative, it may print faster with a #4 than with a #1 or vice versa.

I've gotten a few letters in which the writer has found my two-filter system, which is described in the catalog, "makeshift." But I find it more refined than using the intermediate filters. Because you are using filters designed only for the high and low values, you can achieve a precisely tailored contrast. Note: I have found whether you are exposing and developing film or making a print, if you get the highest and lowest values correct, the middles will almost always take care of themselves.

*

Richard Benson is a piece of work. He thinks he discovered the color printing possibilities of our Compensating Enlarging Timer. He wrote this informative letter, which may interest the color printers among you. (I will not address the tastelessness inherent in his reference to my advancing years. Am I to assume that he is growing younger?)

Dear Fred,

The new timer is spectacular. I have been printing color for some time

now, and immediately took my enlarger apart to get the light sensor installed onto the light pipe that mixes the filtered light. What a pleasure to find that your machine not only times perfectly despite any changes in light level but also automatically compensates for differences I make in filtration while working up a print.

This is a tremendous improvement. I suspect that you haven't done much with color printing, being one of those anachronistic older men who still worship Strand and the monochrome image, but once you get over this, and embrace the wonders of plastic printing papers (aaargh) you will find that the compensating timer has a whole new life in the color lab.

The timer is a real joy to use and I thank you for it. On second thought, why don't you print my letter so all the color printers can hear about it (OK) and give me the timer in exchange. (No.) That way will make my life as a color printer easier and give me more money to do it with.

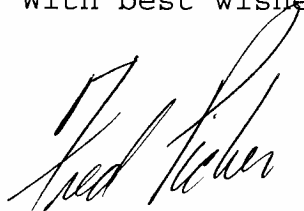
"MY LIFE AS A COLOR PRINTER." Hot dawg, I'll never let him forget that he actually put that in writing. Anachronistic, huh? We'll see about that (as soon as I look it up). And this is the guy Strand thought was the best printer of all time. (Me too.) Isn't there anything that isn't going to hell?

Well, we're going to have a workshop. The staff wants it bad and I said OK

as long as John Willis does the heavy lifting. And the administration and the logistics and the menus and the wine and the films and the program and who sleeps where and the other forty details. And only if we concentrate on field work. Lots of picture making and a lot of looking at and discussion of pictures; student's, staff's and the old greats (evening films.) It will be a change of venue, at Marlboro College, which is a lovely place. If you have expressed interest, we have already sent you an application. If you haven't but would like information, call 802-257-5161.

Winter has been tough around here, but today (March 23) is warm and lovely. The huge snow pack is melting, the sap is running like a fountain, and so is my dirt road. I have to slog two miles which is as close as my car can get to my house. The good news is that the mail doesn't get delivered!

With best wishes,

A handwritten signature in cursive script, appearing to read "Fred Fisher". The signature is written in dark ink and is positioned below the text "With best wishes,".

ZONE VI

N e w s | e t t e r

Number 78, June, 1994

"The choices made by the inventors of these systems and those who employ them to produce images have a *determining effect* on the way that particular photographs look, and are no more 'neutral' than any other such decisions..."

A.D. Coleman

PRINTING IN BLACK AND WHITE
Some thoughts on printing
for the young photographer

Walter Rosenblum

I believe that the way a photograph is printed is an integral part of the creative process because it is through the print, as well as the way the subject is organized on the negative, that the photographer communicates ideas and feelings. It is in the darkroom that one translates a complex and fascinating three dimensional world of greatly varied tonality into a two dimensional black and white image that will appear on a piece of paper containing a limited scale of gray tones. Printing the negative begins a creative struggle, because to give life to the silver emulsion on the paper is an endlessly

fascinating challenge. In the darkroom, one enters a different world, moving between myth and reality, creating something that never existed before outside of the photographer's imagination. This transformation is not an easy thing to accomplish.

A painter has the advantage of a rainbow palette, with an extended spectrum of colors. The work of Van Gogh, Degas and Matisse, for example, is entrancing not only because of its formal conception, but because of the intoxicating way in which these artists used color. However, the problem is not made simpler for photographers who work with color film because the material they use consists of impermanent chemical dyes, which cannot adequately translate the broad but subtle range of colors available in nature. Colors produced by film dyes tend to be garish; they lack depth, and they have a plastic-like quality that I personally find very unpleasant

To effect the small miracle of making the silver coated paper come alive and express the aesthetic and emotional content of its maker's vision is not made easier by the fact that printing materials are inferior

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in the amount of silver they contain to what they did in the past. In spite of ever increasing cost and greater production of paper products intended to simplify printing, the photographer who wishes to print creatively cannot find needed materials. It would be helpful if the industry answered the needs of the entire spectrum of photographers instead of just those in the commercial sector.

Time is a precious commodity today and many photographers feel that their effort is best spent in the field responding to the human events occurring in the world around them. The need for images in film, television, magazines and newspapers which makes photography a very competitive environment in which speed of response becomes all important, leads many to rely entirely upon the narrative and to ignore aesthetic problems; this failure to be concerned with the aesthetic unity of the elements of form, texture, line and the creation of a print of beautiful quality results in photographs that exhaust themselves on the first look. However interesting these images may be journalistically or even historically, they do not sufficiently contain the aesthetic satisfaction to be found in all enduring works of art.

For many young photographers, who more often than not are making photographs with reproduction in mind, the print is a means to an end. Its value is measured by reproduction in a book,

magazine or newspaper, and not as an artistic experience. As a result many settle for one paper, often RC, and one developer. For many years, professionally oriented photographers and even those working for themselves have resorted to darkroom technicians in commercial labs to do their printing. Henri Cartier-Bresson, a germinal force in twentieth-century photography, has his work printed by others. Sebastiao Salgado, one of the most gifted photographers of our time, does not do his own printing either. As convenient as this solution may be, I find it hard to believe that a technician, unfamiliar with the experience that gave rise to a particular photograph, can produce a print that is more than a surface record of the photographic experience. And even when the photographer does do the darkroom work, time is usually limited; in such circumstances, one developer and quick printing takes over. In any case, the final judge is the editor, whose main interest is in the print's reproductive quality and not its aesthetic potential.

To complicate matters, black and white darkrooms are no longer necessary. At a recent visit to a major newspaper in San Francisco I was shown the darkroom, which had the air of a mausoleum. My guide, a prize-winning news photographer, informed me that the room was no longer in use because photographers on assignment shoot everything in 35mm negative

color, the film is then processed at a color lab on site, and wired to the office. It is then formatted onto a disk that will contain thousands of images and all that follows -- enlarging and printing -- is done electronically. Editing takes place on a large computer screen. A button is pressed and out comes a full scale color print which is translated into black and white for reproduction. Treated in this fashion, there are many news and magazine photographers who have come to feel that photographic printing is no longer a viable activity.

Not only is printing creatively a very time-consuming activity, but it is one for which there is little financial reward (until perhaps after one is dead.) While it is true that the explosion within the past fifteen or so years in the number of galleries devoted to photography has produced an audience for black and white prints, educated consumers still are few and far between. Unfortunately, lab prints offered for sale only serve to confuse the market situation.

With the price of fine photographs constantly rising, (witness the recent sale of a Stieglitz print for several hundreds of thousands of dollars), portfolios of photographic prints are a less costly option. Often made in editions of a hundred or so, these prints also confuse the situation because they are mass produced, each print a mirror image of

the last. Again, there is one print scale and one print color. Shuffled through the developer a batch at a time, such prints tend to be lifeless. Compare an original print by Strand to a portfolio print from the same negative and the difference is immediately evident.

There are a number of issues that must be faced before one steps into the darkroom. In more than fifty years as a teacher, I discovered that students would come to the first class carrying a 35mm camera. Light in weight, supposedly easy to use, film inexpensive and plentiful, a fast lens offering control over adverse light conditions, the 35mm camera seemingly serves all functions. This seductive way to enter the world of photography allows students to feel that they have discovered a camera that can be used for portraiture, architecture, a still life or a street scene. Certainly one cannot denigrate the value of this camera. It has been a remarkable instrument in the hands of Cartier-Bresson and Salgado as they searched for the "exact instant" that would give life to their particular vision. However, other photographers have elected to use much heavier equipment and with good reason. Although Paul Strand and Edward Weston certainly did not enjoy lugging fifty pounds of equipment for the exercise, it was their considered feeling that the 35mm negative is too small to do justice to subject matter whose power lies in

highly detailed description. A Strand photograph of a landscape has the feel of every stone, every tree and every cloud in the sky. It is axiomatic in photography that the more you enlarge a negative the more print quality you will lose. Unfortunately, I was not always persuasive in suggesting that students use a camera that would fit the needs of the subject matter they have chosen to photograph, or that a wide variety of cameras might be tried in order to see what purposes they can serve.

My own technique in printing is not terribly complicated. I have two ancient Omega D2 enlargers standing side by side in my darkroom; one uses a cold light head and the other a set of condensers. I control the scale of gradation by experimenting with either light source. I further control contrast by using two developers, a soft working developer and a normal developer. I experiment with both depending on the contrast I wish to achieve. I use a wide variety of papers; Ektalure (my favorite), Portriga Rapid, Galerie, Seagull, Fortizo etc. experimenting continuously in order to achieve a more satisfying print. In the past I used the same paper as Strand, Illustrator's Special, with an E surface, a paper that Kodak discontinued years ago. It was replaced with Ektalure, an inferior paper, which then only appeared in G, a surface rougher and less pleasant

than an E. This irritating situation, which annoyed Strand greatly, moved him to suggest that when a manufacturer discontinues a paper, it is invariably replaced with something inferior.

I feel that a glossy surface prevents the viewer from moving into the image, which after all, is a primary requirement of a successful photograph. However semi-matte paper, which I use, reflects little light and as a result has a reduced tonal scale so I varnish the surface with a solution consisting of a small amount of Stand oil dissolved in Windsor Newton artist's turpentine (approximately two tablespoons of oil to 8 oz. of turpentine.) I first drymount the photograph on to a piece of one ply museum board since I like the photograph to lie flat under the window mat which I use. The museum board is trimmed to the same size as the print. I then apply the varnish with a ball of cotton and then rub it all off immediately. What is left is a microscopic residue that gives life to the matte surface without a gloss. It is unfortunate for my way of working that a fine paper like Zone VI Brilliant is only available in a glossy surface.

It is my belief that there is one definite rule that should be followed in the darkroom... one should always exhaust every possibility in terms of paper, developers, and exposure in order to produce a fine print.

The character of a print depends on what the photographer was trying to express when the original exposure was made. The photographer is naturally affected by the environment in which the image was made. If one were to contrast a Strand platinum print of a scene in Mexico, reflective of the warm, ambient light in that environment, with one he made in Gaspe where the subject matter is bathed in the cold light of the northeastern Canadian coastline, one would quickly see how he needed a variety of papers and printing techniques to translate his original vision.

I work visually by continuously making prints, checking out a variety of papers to see which will do best under the circumstance. This may sound profligate but the cost of printing paper should be the last thing one thinks about -- in other words, print as though someone else were paying the bills. Also, one shouldn't set a time limit. If a week after I have produced a print, I feel it can be made better, I have no compunction about returning to the darkroom to try again.

These lessons were not easily learned. In 1952 I was honored by the Brooklyn Museum with a retrospective exhibition for which Strand kindly volunteered to write the introduction to the catalog. Sometime before the opening, Strand examined the work and told me that I had printed the pictures too dark. Although I was rather badly stunned, as my show of

over 75 prints was due to be hung in two months, I came to the conclusion that in my effort to make the prints as rich as possible, I had over-printed. Although Strand knew how much work had gone into my exhibition, he would not compromise with the truth where photography was concerned. I recalled the standards he maintained for himself, destroying what I thought were excellent platinum prints of Mexico which we were examining together at his warehouse. His comment..."not good enough" are words that are etched in my soul. If there was one thing I had learned from our long years of friendship, it was that photography should always represent one's best effort. You only show prints that are the best that you can produce.

Over time, I have developed specific ideas about how I would like my photographs to be presented. In the past I urged students to visit exhibitions in galleries and museums in order to familiarize themselves with the way other photographers present work. When I began to frame my own photographs, I used the handsome but impractical "Stieglitz" frame which was later adopted by Strand as well. I now use the #33 Nielson frame for it has the smallest edge that I can find. I find the large black frames so much beloved by commercial galleries today a visual abomination because they detract from the photograph.

For those of us who have always felt that art museums should exhibit photography, it is unfortunate, and especially so for students -- that these institutions have become unpleasant places to view images. Conservators understandably require very low light levels for works on paper such as drawings, etchings and water colors. However, for some reason that I shall never understand they mandate the same treatment for contemporary photographs which result in poorly lighted works. Photographs are works on paper, but they can stand a much higher degree of illumination than drawings or watercolors without suffering any damage. My prints are made for viewing under good light conditions; weak light subverts a full experience of my work. Some years ago, an exhibition of my Haitian photographs at the Brooklyn Museum was so dimly lighted that despite my offer to accept full responsibility for any light damage to my photographs, the visual quality of the images was effectively destroyed. A set of rules had been promulgated by the association to which the museum belonged that could not be challenged.

Every photographer must discover his or her own aesthetic reason for being. To do that, the past must become as important as the present, including a knowledge of materials and printing techniques that have been part of photography since its inception. To know what materials were

used by Hill, Brady, Atget, Stieglitz or Strand, what was their working environment, and what was their contribution to photography as an art is to enrich one's understanding of the medium.

To my mind, the photographer is an explorer who finds the world endlessly fascinating because it is ever changing. The truly creative photographer boasts a unique vision, which is best served by an image that is printed with craftsmanship and feeling.

*

As you can see, ease of process, speed, convenience, economy (the only things that seem to concern the average photographer) are not even considered by the true artist.

For him, the final print must be not only technically excellent, it must also support and advance his point of view. When these requirements are fulfilled, as they so beautifully are in the prints of Walter Rosenblum, the photograph achieves its fullest potential as a work of art. Thank you for sharing your thoughts with us, Walter.

With best wishes,



ZONE VI

N e w s | e t t e r

Number 79, September, 1994

Traditional societies
exhibit a delight in art
that we have lost, and must
regain if we are to find
authentic pleasure in life.

Millenium

David Maybury-Lewis

Late in '93 I went to see my old friend Duncan Todd, now with Mercantile Press in Worcester, Massachusetts. We started out discussing the printing of ten pictures for our Note Card series, but the incredible changes in printing equipment and techniques snuck into the conversation. Did you know that you can go to your neighborhood printer and, unless he's already thrown it out, take his copy camera away for free? They don't use them anymore. He'll throw in the lens; probably a Red Dot Artar. (Don't get overexcited; they are very long focal lengths and are "in barrel." That means no shutter. To have a shutter installed would cost more than a new lens.)

The new technology, which replaces the copy camera, will doubtless be old hat to the computer literate among you, but to a

computer-fearing mortal like me, the possibilities smack of witchcraft.

We entered a darkish room. Three people were seated in front of monitors. One was manipulating advertising layouts and text faster than these eyes could follow. I think that's "desktop publishing." I had heard of it and it didn't startle me; to my mind it was just an extension of word processing and not such a big deal.

The other two were doing things to photographs. Duncan put a print of mine on a "scanner" and it appeared on the monitor. The picture contained an old barn. The clapboards were all dark except one which had been replaced with a new, bright one. I had planned to work with Spot Tone to bring it down in value to match the other boards. No need; the technician picked up a neighboring board, slid it over the offending one and zapped it into place. That fast. And perfect.

Got a black curlicue in the sky of your best 8x10 landscape negative that takes an hour to etch out of a print and exhausts your four-letter-word vocabulary? No problem. With the machine you "lasso" it (or else all similar dark values on other parts of the image will be effected) and reduce

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it step by step until it matches the surrounding sky. How about what would be a fine picture of that marvelous church, except for the 'phone wires? Ditto. Gone. Remember a previous Newsletter with a picture of a stream in which a pale stone ruined a passable composition? You could disappear it. Or move it, or make it bigger or smaller and/or darker or lighter.

Suppose you are in Easter Island and finally pure luck and stubbornness rewards you with an unusual picture of two wild horses running behind a group of the huge stone figures. You needn't have waited. You could have gotten one horse from another photograph and placed him in any size or shade of gray that suits your fancy between any two of the statues. Then rearranged his leg position and raised his head and lightened his color and then, no longer recognizable as the same horse, put him between two other statues. Need clouds? A moon? No problem.

Suppose you had a terrific image that's a bear to print. I remember seeing Ansel's "Moonrise" negative. The thought of printing it would make a strong man weep; two, maybe three stops underexposed. The bright moon you've seen in prints would Proper Proof as about a print value V. If today's technology had been available to Ansel, a new negative with density, contrast and even burning and dodging built in could have been created from either a single hard-won print or from

the original negative. You could even sharpen the focus or change local contrast; do absolutely anything you like. You could create a negative that would print "straight" on the grade of paper for which you tailored it.

The technician put someone else's print on the scanner. It was an apple tree in fall. The leaves were gone, but the dark apples still hung from the darker branches. He put the pointer on one apple and clicked it up one value lighter. All the other apples went right up with it. Soon, he had created a black apple tree with white apples. Suppose you want only one white apple. "Lasso" it first. Lasso another one and make it darker, if you like.

Jerry Uelsmann printed with a dozen enlargers using multiple negatives and exposures to painstakingly form his complicated images. Is he now using the computer to create a multiple image negative that can be printed straight away? Or making one fine print the old way and then creating a single, perfect, negative from it? I don't know if he is doing either of those things, but I do know the technology is capable of it.

This miraculous gadgetry is not for everyone. Unless "everyone" has \$50,000.00 that's looking for a home. That's the present cost of the computer, but that won't get you to a negative. For that step, you need an "L.V.T." film recorder which is a sort of a scanner in reverse. At this

writing, figure \$250,000.00. The quality is so good that only another computer can tell whether it is or is not the original print or negative.

I would like to thank my friend Michael Chiusano, who really knows about this stuff, for checking my technical descriptions in the foregoing text. He said it was "reasonably accurate." Michael calls computerization of the image, "the ultimate darkroom."

From now on, no one will believe even a true picture of Nessie or a UFO. When I next get a picture from an old buddy holding what looks like a twelve pound trout, how will I know whether it actually weighed two pounds. Or if he caught it at all! (You used to be able to spot the old wide angle fish-enhancing close-up trick because the holder's thumb looked like it weighed four pounds!) Our previous catalog cover is a print made at the turn of the century with our camera cloned in and the people rearranged. No one could tell it wasn't made "live." Photographs are no longer accepted as evidence in a court of law.

I received a photographic Christmas card from a fellow who attended a workshop some years ago. It was of two lynxes and, according to the printed caption, "photographed by (we'll call him D) in Montana, 1993. Selected for the juried show of the 1993 Natural World Photographic Competition. Exhibition currently

showing through January 16, 1994,
Carnegie Museum of Natural History,
Pittsburgh, PA."

I fish every spring in Montana with a grumpy cuss named Gordon Rose. He's lived there forever and, unless ill, I doubt that he's ever spent a full day indoors. He's always miles out in the countryside fishing, hunting, or just avoiding his neighbors. I called to ask him if he's ever seen a lynx. "Yeah, in a zoo." The workshop fellow, a Floridian who was paying a visit to Montana, found two. In wide open country. Close up. And they were headed for the camera! Now wild (nonexistant?) animals just don't come at you. In pairs. Both were heading for and staring fixedly at a spot on the ground in front of the photographer. The attraction? A cheeseburger or equivalent, I'll bet.

The background was solid, unrelieved, textureless black. That's a problem... Nothing I know in nature could be darker than black rock or pines, and either would show considerable tonal variation. For the background to be solid black it would have to be non-existent; a lightless hole, a cave mouth. It would have to be a huge cave and centered directly behind the animals. The coincidences keep piling up.

What the lynxes were standing on was white. Supposed to be snow. I've seen plenty of snow and never has it appeared so strange or reacted quite this way. It was deep and soft

enough to hide the animals' paws but there were no tracks. How'd the lynxes get there? There were no leaves, twigs, stones, no other tones or substances. The solid white "snow," the solid black nothing, and the lynxes were all that the picture contained.

What's going on here? My guess; the animals were caged and headed for the aforesaid hamburger. The background, possibly something as exciting as a chain link fence, was computered into solid blackness. (With a little imagination and a few bucks more, he could have slipped in a grove of snow-laden spruce from another picture.) The foreground, which in real life contained the hamburger and maybe a lot of sign that the animals had been hanging around the area for quite a spell, had been computered into whiteness.

At what point is a picture faked? Is my barn board fix and Ansel's Moonrise repair (if it was available and he had availed himself of it) OK in that they are only cosmetic and both pictures could have been, and indeed were, created without benefit of digital goings on? How about the wires in front of the church? Still OK? Now suppose there was a broken tree branch hanging down in front of the church. OK to take it out, too? Or just wires? How about removing a dumpster? Would you repair a broken window in the building by sliding an unbroken one in front of

it? Is removal of a chain link fence behind tame lynxes OK?

I think none of the above. There's no such thing as a little bit pregnant. Once you've broken the code, you've broken the code. I'm not saying computering shouldn't be done, but if an image has been fooled with at all, I would like to know. Perhaps there should be a tradition of old-fashioned pictures which are assumed "real." And all manipulated images stamped something like Computer Re-Adjusted Photograph (C.R.A.P.)

Naturally, the new technology will bring forth its own art. Like the electric guitar did. Is an electric guitar OK? Then how about a synthesizer that can hold a higher note on a trumpet than Louis Armstrong ever blew for longer than he ever lived?

Some people will choose pixels rather than oil paint or silver halide. "Painting" will be made easier; you can change a sky from blue to pink or remove twenty pounds from a model just by clicking your mouse. Whether the types who commune with computers have the genes to create emotional and exciting visual (or audible, for that matter) works of emotional content remains to be seen. I think some will; I believe that artists, not tools, create art. Artists created art with charcoal on the cave walls at Alta Mira and they will create it with computers at silicon valley. But what's to become

of us old-fashioned types who will stubbornly continue to do it the way we always did?

To get my mind around puzzling things in a constantly more complicated world, I often turn to the writings of my friend John Voelker. Voelker is a.k.a. Robert Traver, the author of *Anatomy of a Murder*, and *Trout Madness*. He was also a supreme court justice. He died March 18, 1991 at the age of 87. His *Testament of a Fisherman* puts fishing, meandering, photography, and other "wasteful" pursuits beautifully into perspective:

I fish because I love to; because I love the environs where trout are found, which are invariably beautiful, and hate the environs where crowds of people are found, which are invariably ugly; because of all the television commercials, cocktail parties, and assorted social posturing I thus escape; because in a world where most men seem to spend their lives doing things they hate, my fishing is an endless source of delight and an act of small rebellion; because trout do not lie or cheat and cannot be bought or bribed or impressed by power, but respond only to quietude and humility and endless patience; because I suspect that men are going this way for the last time, and I for one don't want to waste the trip; because mercifully there are no telephones on trout waters; because only in the woods can I find solitude without loneliness; because bourbon out of an

old tin cup always tastes better out there; because maybe one day I will catch a mermaid; and finally, not because I regard fishing as being so terribly important but because I suspect that so many of the other concerns of men are equally unimportant -- and not nearly so much fun.

How will we who exist to participate and hope to record those rare and magical moments be affected by the easily obtained computerized images of the future? Not at all. To us, like Voelker who knows what is unimportant, the chase and occasional capture of the elusive, the unique and the wonderful that always drove us always will. "...because maybe some day I will catch a mermaid."

Last week I spent four days meandering back roads up to St. Johnsbury, then north and west into Quebec, south to Poultney, and finally back home by way of the beautiful Rt. 100, through the Granville Gap. On the trip I covered probably eight hundred miles, went over several passes, through many small towns, past numerous ancient hill farms, and walked along a dozen rivers. I had a fine time, but I got home with twenty-eight of my thirty 8x10 holders still filled with unexposed film. I got but two pictures (but one's a mermaid!)

But I don't think that matters. I hope that I am intelligent enough to know that none of my work is going to

change the world, and wise enough to know that my obsession(s) need no justification.

*

Though it might seem strange to mention money in a photo Newsletter, it is undeniably helpful in obtaining the free time, expensive gear, and materials necessary for serious photography.

Here's a *simple* way to get a lot of it: It's automatic, but it takes discipline.

Dan O'Higgins, like a lot of folks, was looking for a scheme that would consistently produce big profits. But he was different. His genius lay in searching for a repeating pattern *in a limited area*; among the only 30 companies that make up the Dow Industrials. He set out to find what actually happens. (My kind of guy. "What happens, happens.")

He found that if twenty years ago you had spread \$1,000.00 evenly among the thirty Dow Industrial stocks, you would now have \$9,099.00. But computerizing right along, Dan found that if you had spread \$1,000.00 evenly among *the five lowest priced of the ten highest yielding Dow stocks*, (and sold them every twelve months and bought the new lowest-priced highest yielding five) you would have \$57,196.00. You would have averaged more than 21% per year.

There were only two down years;

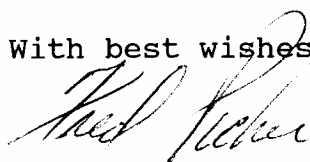
'74 was down 3.5% which was followed by +70.1% in '75. '90 was down 15.2% which was followed by +61.9% in '91.

The very lowest priced stock averaged only 8%. Without it, you would have averaged 23+%. For some weird reason (who cares?) the #2 stock has averaged over 27%, so I leave out the #1 and double up on the #2. That would have produced over 25%!

I have followed this system for six years, which included '90, it's worst year in twenty, and my original stake has more than tripled. No money manager, no mutual fund I know of, has come close to this performance over time. All you need is \$5,000.00 or multiples thereof, and discipline. Note; it doesn't matter what date you start the program as long as you stick with it for twelve months. Try it. It just might keep you in film, lenses, four wheel drives, airline tickets and earlier retirement!

I hope so.

With best wishes,



PS. If you want to know more, get the book, *Beating the Dow*. Or Call (201) 664-3400, mention Fred Picker, and get a free copy of the *Beating The Dow* newsletter with this months stock list, etc. Our next Newsletter will contain some thoughts on advanced printing and a tasty lowfat chicken dish maybe.

ZONE VI

N e w s | e t t e r

Newsletter 80, December, 1994

"A good experiment is simply one that reveals something previously unknown."

Harold E. Edgerton, 1937
(He devised a flash tube capable of making a one millionth of a second exposure every hundredth of a second.)

Early on I discovered that if there's something you have to know, only by going through the process required to see what happens can you get accurate information. As important as finding out what happens technically, the confidence gained seems to have a most beneficial effect on the aesthetic aspects of the work. And what you learn on our own you will never forget.

One of Ansel's books describes a method for building up the density of a thin negative. It sounded too good to be true; you could underexpose (in effect increasing your film speed) and then build up the negative in the darkroom.

Ansel said, soak a developed negative in pure hypo and then tone it in selenium, just like a print. When experimenting with a print, it doesn't matter if you mess it up; you can always make another. But when

experimenting with film, I always try something new on a scrap negative. I immediately thought of a good candidate for intensification; a photograph I had made in Iceland of a white horse in front of a dark cliff. I either guessed the exposure wrong or the light changed or a little of each. Anyway, it's one or two stops underexposed. Wouldn't you know it would be a steady seller, so I have to keep printing it. I had several other similar (underexposed) negatives of the same scene in which the horse is not in as good a position. I used one of them to see the effect.

I followed Ansel's directions exactly: short soak in fresh hypo first. Then, to make sure I could compare the toned with the untoned, I poured about two inches worth of the maximum recommended dilution of toner at the maximum recommended temperature into a small graduate. I then stood the 4x5 negative knee deep in the toner for the maximum recommended length of time, agitating gently to avoid splashing toner on the top half of the negative. When the time was up, I expected to see increased density below the two inch line. I saw nothing, but to give it every chance, I washed and dried as directed and made a proof. The proof showed there was no difference in density.

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The procedure is so simple that I couldn't imagine an error but this wasn't the untested theory of a magazine writer; it was Ansel speaking. So I dumped all solutions, made up fresh, doubled the concentration of toner and the recommended length of time and tried another negative. Effect, zero. Maybe it worked for Ansel. Can you make it work? Am I missing something?

Always test for exactly what you want to know. For example, if you want to find out what a one stop exposure reduction will do, don't use an ND filter. Use a one stop exposure reduction.

I once received a fogged sheet of paper from a fellow who had bought a safelight. To "test" it, he had laid the paper on top of the safelight for two minutes. He called to ask if I had any suggestions. Biting my tongue, I gently opined that he might avoid the problem in the future by not laying his prints on the safelight before developing.

Reciprocity departure charts are usually included with the film. I have found them inaccurate. Experience indicates that it is virtually impossible to overexpose a negative in very dim light. In the "Photographing" video, I showed a scene in my barn and the resulting print. The meter indicated an eight second exposure. For an indicated Tri-X exposure of ten seconds, Kodak recommends fifty seconds. And a twenty percent

reduction of development time. I exposed the first negative one minute, the second one five minutes, the third a half hour, which gives you less than one stop more density than five minutes. The last exposure was for three hours. Three hours gives about a half stop more density than one hour. I ignored the directions to reduce development of the film because "reciprocity increases contrast." Low light is always low in contrast unless there is some obvious highlight, so I lengthened development by 35% to increase both density and contrast. The final print was an 8x10 contact on grade 3 from the three hour negative developed for eight minutes instead of the recommended five.

Many people are reluctant to try something new. I've asked folks who have called or written about their erratic exposures if they have tried my exposure system: "Place the high value on Zone VIII and take the picture." They haven't. They generally "don't believe it will work" or say, "I don't work that way." If the way they work isn't working, why, after requesting a suggestion do they refuse it? If they really wanted to know, all they'd have to do is make negatives on their next outing in their usual way and then make a second negative of each scene, portrait, etc. my way and proof them both. How can they lose? They either end up with better negatives or have the satisfaction of telling me I'm wrong.

Someone sent me voluminous copies of guys battling passionately over the merits or lack of same of our modified exposure meter. These modern warriors employ computers rather than swords, etc. Though none had used our meter, each had a theory. Rather than hurl gigobites, they could simply order a meter and in minutes make exposures of variously lit, common objects --sky, grass, red paint, etc.-- on roll A using our meter. Then do the same on roll B using their meter. Develop and proof the film. All densities on roll A will match. If the roll B negatives also match, their meter works too and they could send our meter back for a refund. They'd learn something and could get on with their lives. Come to think of it, their lives may have less to do with making pictures than arguing by computer!

I have come to adopt as standard procedure an exposure ritual that I used to employ only occasionally. For my first exposure, I insert a holder with the even-numbered side facing the lens. I place the high value on VIII and take the picture. Then I close down $1\frac{1}{2}$ stops and make a second exposure on the odd-numbered side of the holder. In the darkroom I stack up as many as twenty 4x5 holders or ten 8x10's, even-numbered sides facing up. Lights off. I remove all the top (even numbered sheets) and develop them normal. Then I unload and develop the odd-numbered sheets Normal plus $1\frac{1}{2}$.

This procedure provides a normally

developed maximum printable density negative; a negative that I'm convinced is capable of invariably making the best possible print. I also get a second maximum printable density negative but with the equivalent of 1 1/2 paper grades higher contrast. It provides the freedom to print in half grade differences from the normal negative. And developing the two negatives separately insures that a mechanical mishap befalling one will not spoil the other. Finally, I get the equivalent of an identical back-up negative of every scene because closely matching prints can be made from either negative by changing paper grades, changing development times, changing developer dilutions, etc.

The N plus 1 1/2 negative printed on a grade 1 gives you the equivalent of a grade 2 1/2, but the effect is often longer scale, richer, more elegant, more "silvery" than the normal negative printed on grade 2 printed up to 2 1/2. Or on grade 3 quieted down.

To find your N plus 1 1/2 development time, expose a negative placing the high value on VIII. Make a real picture; a white building in sun would be fine. (Before developing it, cut one corner off. It will be used as a guide.) Expose three more negatives from the same camera position but place the high value on VI 1/2. Put all negatives into the developer together and pull the cut one at your normal time, the next at 35% longer than your normal, another at 65%

longer, and the last at 100% longer. If the Proper Proofs don't reveal a negative with high values exactly matching those of the normally developed negative, one will be so close that you can interpolate a time.

Devising your own tests to find out what you have to know is rewarding and invigorating, so rather than answering some of the questions I've received, I'll suggest some thoughts on how the writers might go about finding the answers themselves.

Question. How near can I stand to a portrait subject before disconcerting distortion appears?

Answer. Find out. Get a portrait subject and take picture #1 at three feet, #2 at four feet, #3 at five feet, #4 at six feet, #5 at eight feet, #6 at ten feet. Make a Proper Proof and then *you'll know*.

Q. How do you get the portrait distances exact when you have a moving subject and a moving camera position?

A. Solve the problem. Seat the subject in a chair and use a tripod. Use a tape measure to measure from lens to subject's nose. Too much trouble? Yup, for most folks.

Q. Would it make a difference which lens I use?

A. Find out. With different lenses and/or different cameras, make pictures at the minimum distance you discovered from the previous test. Or

any greater distance. Make a Proper Proof and compare. Is the appearance of the subject different or the same regardless of the lens length or format if the camera distance is the same? If you take anyone's word for it, you do yourself a disservice.

Q. I remember reading that you use Zone VI 1/2 as caucasian flesh tone rather than Ansel's suggested VI. Which is right?

A. Make two pictures, one exposed on VI, the other on VI 1/2. "Waste" another film and make a third on VII. Check the proper proof. You might find that the V 1/2 is better than VI for most caucasian subjects. You might also see that the VII would be better for some subjects, such as a blonde Scandinavian child. Finally, because there is as great a difference in tone between a black person and the marble pallor of a fashion model as there is between old barnwood and fresh white paint, you might discover that no arbitrary placement of flesh tones is universally correct.

Q. For a portrait, where do you focus?

A. I focus on the near eye. The near eye is about one third of the distance between the tip of the nose and the ears. It also happens to be the sharpest focus point for a close subject. In addition, the eyes should be the sharpest thing in the print. And there is a bonus; a bright

highlight to focus on.

Q. When I find the distance that I like for portraits, why can't I just set that distance on my lens and move forward and back 'til the near eye is sharp? That way I won't have to focus and I'll always be at the minimum distance.

A. Good for you (if that was your question!) That's exactly what I do when using a hand camera. Years ago at Polaroid a group of us designed a one trick pony; a portrait camera. It was called the Big Shot. The focus was fixed at the "proper" minimum distance and the user was directed to "focus with your feet." We placed the pentaprism above the middle of the viewing screen so that when the photographer got the subject sharp, the head wouldn't be where it is in so many 35mm pictures; in the center with a lot of wasted space above. The Big Shot was a thing of simple genius except in the market place, where it was a thing of dismal failure.

Q. Will I like portraits better if the camera is above, below, or even with the subjects nose?

A. Find out. After you discover the minimum distance, make an exposure at two feet above nose level, one foot above, nose level, one foot below, and two feet below.

Q. If I'm using a view camera, why can't I just raise or lower the lens?

A. That won't materially change

the angle from which you make the picture, though it will place the head where you want it in the frame.

Keep the camera level or the low angle ones will give you a pin head, the high ones a... pin chin? View camera users can level the camera and raise or lower the lens for the desired framing. Hand cameras also should be level, even when it means wasting film at the bottom or top of the image. My dear sister's pictures (smiling groups seated around party tables or grandchildren) have greatly improved since I convinced her to level the camera by the simple expedient of bending her knees.

Q. I did the film speed test and the developing time test, but my Proper Proof shows that my negatives still aren't as I'd like them. I'm sure I did the tests right. Should I do the tests over?

A. Not if you are sure you actually did what you think you did. The tests are to get you into the ball park and, of at least equal importance, they give you direct experience of how film works. The Proper Proof is the real control. When your negatives make good Proper Proofs, they will be as good as they can be.

If the low values are too low on the Proper Proof, increasing development won't help; you need more exposure. Make an exposure at your present ASA, another with a half stop

more, a third with a full stop more, and a final one with two stops more exposure. Check the new low values on your Proper Proof and choose a new ASA setting. Ignore the high values at this point. If, when looking at the proof, you don't know where you placed the low value when you made the picture, you won't know if it came out higher or lower than it should have. Make careful notes. With sheet film, you can easily see the sequence of increasing densities and will be able to match the films to your notes.

If, after you choose your film speed, your high values are too high on the Proper Proof, reduce your negative development time by 15% on the next roll, etc.

If the high values are too low when the low values look right, increase negative development time. Again: if you haven't noted know where you placed the high value when you made the picture, you won't know if it came out higher or lower than it should have.

Q. There are no sequential numbers on sheet film so when I test, how can I tell which filters, etc. were used?

A. I put a hat, lens cap, white rock, etc. in the lower right corner of the scene for light yellow, lower center for Zone VIII placement, etc. Before each exposure, I write down "hat at lower rt = yellow filter, or = high value on VIII," etc.

Serious photographers will face many situations unique to their work. Have confidence. You can devise useful tests to answer any question.

CONTEST

My friend and regular workshop staffer, John Willis, is the founder of In-Sight, a photography project staffed by volunteers. It is free to all adolescents in the Brattleboro area. In-Sight was largely funded last year by Zone VI Newsletter subscribers. Let's do it again!

Unmounted prints, any size or color, are welcome as long as a \$15.00 check to In-Sight -tax deductible- accompanies each print. The winner gets \$1,000.00 worth of Zone VI equipment of her/his choice. Send entries before March 15, by mail or UPS to:

In-Sight
RR 1, Box 2652, State Forest Rd.
Townshend, VT 05353

If you want your work returned, include a postage paid return envelope.

With best wishes for the Holidays,

A handwritten signature in cursive script, reading "Fred Picker". The signature is written in dark ink and is positioned at the bottom right of the page.

ZONE VI

N e w s | e t t e r

Newsletter 81, March, 1995

"[My work is] designed to amuse, bewilder, annoy or inspire reflection, but not to arouse admiration for any technical excellence usually sought in works of art. The streets are full of admirable craftsmen, but so few practical dreamers."

Emmanuel Radnitsky (Man Ray)

I have found that printing is much like writing. Perhaps it is even more like editing in that you are massaging an already formed idea or, in this case, the physical form of the original vision which is the negative. You alter and eliminate and adjust. You badger it and worry it because the final print is the end of the line; the summation of all that has gone before. It represents the photographer.

We often try to make simple the complex, to find universal truths in an individual vision, to make rules. I believe it is possible and even advantageous to make rules for *mechanical* procedures: "Place the high value on VIII and take the picture" and "print for the desired high values and adjust the contrast to achieve the desired low values."

But the requirements of art are far more demanding, more ethereal than

any rules of mechanics. It is impossible to make rules that cover the thousands of creative alternatives contained in a scene or a negative, so those who attempt to compose their photographs or print their negatives by formula are sure to fail.

I remember a workshop printing demonstration in my darkroom during which I explained what I was doing and why I was doing it as I went through the steps of printing a negative, exactly as I showed in the "Printing" video. (You can follow a *procedure* by rote, but the *decisions* are formed by experience and instinct.) It was a snow scene with pale shadows of trees and I remember clearly that we found the fifteen second strip too weak and the eighteen too strong. So we made full 8x10 pilot prints at sixteen and seventeen seconds. (Test strip prints at this stage will not cut it; you have to see the effect of the additional exposure on the whole print. That way you will know, perhaps, that the right side should get sixteen and the left seventeen, etc.) Seventeen was still a bit weak, so we tried full prints at 17.3 and 17.6 seconds. We finally settled on an exposure of 17.3. Laugh if you want, but the sharper-eyed students could really see the difference in the high values. It was snow.

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After the pilot exposure on the proper grade of paper had been precisely determined, we studied the possible refinements that could be added. Step by step we moved ahead, writing down the steps, trying out, then often re-thinking and subsequently reducing or increasing the various burn exposures. Finally, after six or eight sheets, we settled on eight or ten refinements, all of them small increments of the original pilot exposure. My printing chart shows that the longest burn was three seconds.

As I always do, I gave the enlarger over to the least experienced student and asked her/him to follow the print recipe form we had filled out. I do that to show that no special dexterity is needed; that they can do it as well as I can if they use my method. They use my "cover board" technique to assure precise burning position and they follow the "recipe" to assure precise exposures. See "Printing with Fred Picker" video.

When the final print had been exposed and developed, we put it up alongside the original pilot print, which previously all had agreed was very good. As usual, everyone was amazed at the difference, but I'll never forget the fellow who asked, "What did you really do?"

I didn't get to all the questions in the last Newsletter, so will attempt to fill in the blanks here:

Q. If my negative development time is too short for proper agitation or I regularly develop a large number of sheet films together can I somehow increase the developing time to assure sufficient agitation? If yes, how can I determine the new time?

A. Two ways: You can dilute the developer more than usual. Try 50% more. That would be 1-48 for HC-110 instead of the usual 1-31. Here's the test to find out the new time.

Make six identical exposures of a regular scene. Not of a gray card, etc. Cut off one corner of one negative and develop it in your normal dilution for your normal time. Now put the other five in the new diluted developer all together. Pull a sheet out after it's been in 20% longer than normal time. Then pull another at 40% longer, 60% longer, etc. Fix, wash, dry and then Proper Proof them with the cut corner negative. The one that matches the cut corner negative received the right development time in the new dilution. The Proper Proof is the best technical tool I know. It shows what happened.

That's the old way and it works fine, but there's a better way if you have a Compensating Developing Timer. Use cold developer. About 60 degrees or so will really slow things down. (You need not use the same temperature next time. The timer will compensate.) Conversely, for a very few sheets, I use warm developer to speed things up. Same for prints; for a dozen at a

time, I use cold developer to lengthen the time. To keep it cold during a long printing session, I stand a stainless graduate of cold water in the developer tray whenever it warms up. In Florida or Arizona, a graduate of ice cubes might be needed.

Q. I've heard that VC filters won't work with cold light. True? And if not, why not.

A. Blue light makes VC contrasty, green-yellow makes it soft. Because Cold Light starts off bluer than tungsten and most VC filters are designed for tungsten, the same number filters might give more contrast than they indicate. "Might," because the bluer light is partially and, depending on the collimating characteristics of the particular enlarger, sometimes entirely offset by the inherent higher contrast of condensers (the Callier Effect.) With filters designed for tungsten, you might have to go a grade softer; a #2 filter for a grade 3 print, for example. The filters Zone VI sells are especially formulated for cold light and work well.

Q. Ansel's book recommends mixing the Selectol Soft with the Dektol for in-between grade prints. You say use separate trays. Why?

A. 1) If you mix 'em and find that you overdid the Selectol, all you can do is add more Dektol or Zone VI developer, etc. Then you try a print and find you've added too much Dektol so you add more SS, etc. 'til the

stuff runs over the top of the tray. Even if you finally get it right, you've lost track of what you have in the tray so your records are no good. You will have to start over the next time you print that negative.

My way, the only variable is time; you develop the first print, say, thirty seconds in the SS, then ninety in the Dektol and look. (I always total two minutes.) Too soft? Try twenty seconds in the SS, one hundred in the D. When you're done with that negative, you can document it accurately for the next printing. And for the next negative, instead of a mystery mixture that you will have to dump out, you still have the same two trays of known content. The resulting prints look the same whether developed in the mix or in one developer after the other.

Q. Any new wrinkles since the printing video?

A. I keep trying to find ways to leave things out, to make mechanical steps simpler. I've been able to eliminate the idea of dodging and no longer dodge, even on the pilot print exposure. What I do instead is to *give the minimum exposure to the pilot print*. (The same shortened exposure that the dodged area would receive.) Then I give "burn" exposure(s) to other areas as needed. In other words, I no longer "think" dodging; all printing refinements are now burns. Because all refinements are now additive, it's a simpler concept,

easier to grasp, a more direct approach.

To burn around a difficult-shaped area, (I used to think of it as dodging an area) I figured out a way to quickly make an absolutely perfect mask: Set up the enlarger for the print size you want. Then lower the enlarger head to about half the distance to the baseboard. Refocus roughly. Now lay a card on the easel and outline in pencil the section of the projected image you want to dodge. Cut out what you outlined and tape it to a wire or "Lawton" (my wire coat hanger, bent into a circle, with crossed black threads to support the dodger). Crank the head back up, refocus, and you're in business.

When I make a lot of identical prints, I tape the easel to the counter to keep it from creeping.

I found the handiest tape in the hardware store. It's silver mylar and generally used for fastening insulation, eliminating drafts, etc. It's strong, sticky, and opaque. I got a 1 1/2" roll. It's perfect for eliminating those pesky "stars" that appear here and there in an otherwise dark darkroom and for repairing anything from a leaky bellows to a splintered tripod leg.

The lines of increased density inside the edges of 120 film are from insufficient agitation in the developing tank. The problem arises when the tank is full to the top.

There is no room to agitate. Try this: put the reels in the tank and add water to just cover. Now pour the water into a graduate and see how much you've got. Say, twenty-nine ounces. The next time you develop, pour the mixed developer into a graduate up to the twenty-nine mark and pour only that into the tank. (Throw out the remaining ounces.)

If you develop sheet film in dip tanks, you invite disaster. The agitation is excessive at the top where the supporting bar and clips create turbulence as you lift, insufficient below where the rest of the negative is gently lifted, and always in the same direction. The "daylight" tanks for sheet films are even worse. Forget smooth skies with either method.

Spend a half hour, lights on, learning to use trays. Once you learn, you'll, 1) get perfectly smooth negatives, 2) do up to twenty 4x5's at once, 3) you won't have to buy, load, wash and store tanks, 4) you'll never scratch another negative. You'll have solved the whole problem for life. Not a bad return for a half hour...

The tracks of sheet film holders or the configuration of film guides in hand cameras completely protect the film edges. If they didn't, all your edges would be fogged when you made an exposure. Right? So if the edge of the film is fogged, it's from a light leak in the darkroom.

Camera light leaks always start

heavy inside the track area (the track area is always clear) and spread and diminish in density as they spread across the film. It usually looks like a comet, densest at the nose.

A light leak through the light trap of a sheet film holder will appear as fog along the short edge of the film at the end opposite the notches, but inside of the film edge. The solution; on all vertical compositions, shield the holder with the focusing cloth during the time when the slide is out. On horizontal compositions, if the sun is low and to your right it might sneak into your holder. Shield the light trap with your head or the cloth to keep direct sunlight from striking it.

A common cause of those light leaks covering a big area of the negative is caused by improper insertion of the holder or imprecise pulling or inserting the slide. These leaks typically show fogging density along one short side of the film, diminishing toward the middle of the negative.

To avoid these problems, push the holder all the way in, then tug it back a bit to make sure it is properly seated against the light trap. To see exactly how this works, remove the camera back (or the bellows), insert the holder and push it back and forth to get the feel of it and see the effect.

An identical-appearing area of added density parallel to one edge of

the film occurs if you cracked the back open when you pulled or inserted the slide. To withdraw or insert the slide without breaking the light seal between the camera back and the holder, press your thumb against the center of the groundglass, your fingers over the top of the camera back, and squeeze as you pull or insert the slide. This is less necessary with cameras with bails, such as ours, because the bail leverage permits stronger springs to be used in the first place. But I don't take chances; I squeeze anyway.

We occasionally get blurry negatives from camera buyers and they want to know why. Unlike hand cameras, in which the image is projected through prisms and mirrors, etc. which can get out of whack, view camera images are projected direct on to the groundglass so what you see is exactly what you will get. But you must see! I would like to repeat that the ONLY way to go for view camera focusing is with magnifying eyeglasses. The loupes are terrible because 1) you can only see part of the image at a time, so you Focus on the Far (using the loupe on the bottom of the glass) and then you move the loupe to the top and tilt 'til the Near is sharp. Now you look back at the far; it's out of focus, so repeat...endlessly. Use magnifying glasses. At the local drug or discount store, try different strengths. Pick the pair that focuses sharply on an object located about four to six

inches from your eye. The glasses cost about twelve dollars. Get a neck cord for them so they will be handy. Magnifiers also come in handy for spotting prints.

If the negative density is weak or non-existent at the top, there was too much rise for the lens to cover or a vignetting lens shade might be the culprit. It can look good on the groundglass, but not really cover. To avoid the problem, set the taking aperture, then look through the lens. If you can see all corners of the groundglass clearly, you are OK.

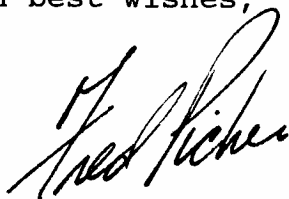
There will be a Zone VI Workshop this summer, August 20th to 26th. It will be run by John Willis and Dave Usher and will take place at the Marlboro College campus in Marlboro, Vermont. Both John and Dave have taught with me; Dave, for twenty summers, John for eleven. John is the head of the photography department at Marlboro and was formerly at Princeton until the commuting got too tough. He also teaches several times a week at Harvard. Dave has been the supervisory photographer for the Department of Interior for the past twenty-five years. He is also chief photographer for the Geological Survey and the printer of William Henry Jackson, Timothy O'Sullivan and other historically valuable negatives. Both are outstanding photographers, printers, and teachers and sweet

personalities to boot. They will be teaching the Zone VI methods and they don't need me, but I will be around. For a brochure or further information write John Willis, RR 1, Box 2652, Townshend, VT 05353 or call him at (802) 365-7248. College credit is available.

Jill Quasha sent me the most marvelous book. Marjorie Content, Photographs. It contains the extraordinary images of an amazing photographer, heretofore unknown to me. The images are marvelous; calm, delicate, elegant, fresh and simple. Jill writes truly, "Clearly, here was an artist who had undeservedly slipped through the net of photographic history." Treat yourself by contacting W.W. Norton, NY, direct or through your bookseller.

There are several openings in my "print club." If you would like an application, call me at 802-257-5161.

With best wishes,

A handwritten signature in black ink, appearing to read "Fred Richer". The signature is fluid and cursive, with a large, sweeping initial "F" and "R".

ZONE VI

N e w s l e t t e r

Newsletter 82, June, 1995

"'Now boys,' said the hopeful soul at poker, 'if we all play carefully, we can all win a little.'"

Fred Schwed, Jr., from his book
Where Are the Customers' Yachts?

Remember the "Beating the Dow" money-making scheme I mentioned in a fall newsletter? Those who acted by 12/1/94 were up 18.3% on May 1; five months. The Lipper average of 1762 equity funds was up 9.11%. Call 201-767-4100 for a sample newsletter.

I've tried, cussed at, and ultimately discarded dozens of film markers, but finally found one that, in a year, hasn't clogged or leaked. Because it's disposable, you never have to take it apart or clean it. It has marked about seven hundred negatives and it's still working. It's a "Staedtler Mars Magno" and I like the .30/100 size. Art supply or stationary stores should have them. If you can't find one, try Bakers' Bookstore, 802-254-2328. It costs about ten dollars.

I received a question about any changes I would make to my darkroom, which I had described in an ancient Newsletter. I've made no structural changes. All changes have been

substitutions or additions of equipment. Most important were the addition of the Compensating Developing Timer and the swap of a customized wall-mounted 4x5 Omega enlarger with a Ferranti V.C. Codelight and Zone VI Stabilizer for a wall-mounted Zone VI 5x7 VC Enlarger and Compensating Enlarging Timer.

Some small conveniences have been added. They include a thin rubber mat --rug liner material-- size about 16x20, which I taped to my enlarging counter. It not only keeps the easel from sliding but, when properly marked, it speeds things up for proper proofing. To mark it, I raised the enlarger head to Proper Proof height, inserted a negative, and focused on the mat. With a felt tip marker I traced the rectangular outline of the projected image and marked it, "P.P." Next, I placed my proofer in the center of the lighted rectangle --it should be at least an 11x14 lighted rectangle-- and traced the proofer with the marker. Now, whenever I want to make a Proper Proof, I just move the head up to the PP mark on the column and quickly focus up or down 'til the light fits the PP frame on the mat. The reason that you must focus is because different bellows extensions (left in after your last print) will change the light

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intensity. For all your Proper Proofs, make sure you also use the same negative carrier, lens, aperture, exposure time, paper, developer dilution and developing time. Do you have this information listed as well as development times, etc.? If you have a memory like mine, you had better! This setup guarantees consistency of PP exposures, reduces mechanical operations, and saves time.

I'm convinced that the quicker and slicker you are at the mechanical requirements of photography, and there are a lot of them from loading film to setting up a tripod, the more juice you will have left for the more demanding creative requirements.

If I were to rebuild or redesign anything in my darkroom, I would add a second drain in the sink. Two drains will prevent an errant tray or sheet of paper from causing a flood by covering a lone drain while the washer is running.

I had originally built a set of screens that hinge down from a wall. They were large and bothersome to remove for washing. I now lay the Zone VI Screens across my sink. I can stack twenty-one screens to dry a hundred and twenty 8x10 print club prints at a time. Because these screens stack about a half inch apart, air circulation is reduced so the prints dry more slowly and end up flatter. The smaller screens are much easier to handle. They can be washed in a sink or taken outdoors and hosed off.

Some advise drying prints face down and I used to do it that way, but occasional mysterious screen patterns in sky areas convinced me that face up is better. With the stacked screens, the print curl that you would ordinarily get when drying face up is reduced.

One of the differences in the equipment of serious and/or professional workers and the less dedicated (or financially motivated) is in the *number* of important items they carry. I once wrote an order for a fellow for a new 4x5 camera. We went through the accessories he'd need; tripod, focusing cloth, etc. When I got to holders and film, I suggested that he get at least twenty-four holders so he could figure on --if he works as I do-- at least two days in the field without reloading. (I never go out with less than fifty loaded holders.) I also suggested a minimum of five hundred sheets of film so his testing would cover a fairly substantial emulsion batch. He said he wouldn't need any holders or film right now; he wanted to get used to the camera first.

I remember mentioning in a Newsletter following a photo workshop to Africa that some of the participants arrived in Arusha, Tanzania, without film. They figured to buy it there to avoid carrying it. What they got was dated ten years ago and had been stored at a probable

average temperature of 100 degrees. It cost, if memory serves, at least \$15.00 for twenty-four exposures. Over the years, lots of workshop people have arrived without film.

When I apprenticed with a working pro, I learned how to be excessive. I remember an assignment he had to photograph a bowl of cereal flakes. The layout from the ad agency showed about half the bowl in the frame, so about two tablespoons of flakes and a strawberry cut in half would, I figured, do the job. He sent me out for a dozen boxes of cereal and six pints of berries! We emptied the contents of a cereal box onto a counter and, with tweezers, he picked through the flakes ending up with about six perfect ones. Then on to the next box and finally, on to the search for the perfect berry. I learned that you can't have too much, only too little.

Going to Easter Island on assignment? Figure about seventy pictures for the book? I'd guess one hundred and forty setups would be plenty for seventy keepers. Two negatives of each setup is two hundred and eighty sheets. But I'd like a third set of negatives to be developed $N + 1 \frac{1}{2}$. That set would also serve as a backup-backup and would travel home separately. That's 420. But portraits might take five or six exposures. Figure about ten subjects for the book, so photo fifteen people and pick the ten best. Though

portraits are part of the seventy keepers required, count them as extra. That's ninety for portraits; call it a hundred. We're up to five twenty, and that should make it easily because the percentage of keepers should be extremely high. It should actually be better than one out of two setups because these pictures are less demanding than personal work. Their purpose is primarily illustrative. The relationship might be likened to a straightforward, well-lit picture of a shell for a textbook compared to a shell as might be photographed by Edward Weston.

Photographing even less demanding, less ethereal subjects such as commercial or architectural works should result in a near one hundred percent keeper rate. (Admirable, which, with rare exceptions, is all that these pictures really can be, is a very long way from wonderful.) A primarily illustrative book falls somewhere in between so I figured a batting average of five hundred which, in this case, happened to require five hundred sheets. So I doubled that estimate and took a thousand.

My actual exposures were about four hundred, but I'd rather bring six hundred home than wish I had just one more...

Holders? The more you have, the less often you will have to load. Away from home, setting up to load takes longer than loading.

The "otherness," that elusive

second layer that I search for in personal work is not a requirement for this sort of book any more than it would be for a commercial architectural or industrial picture. Matter of fact, the mysterious, the surreal, the abstract, the ambiguous, the metaphorical aspects and the optical illusion that I strive for in my personal work might be confusing to the reader of a descriptive book. He is more interested in the factual appearance of the subject than in the personal responses of the photographer.

Because the personal work is far more difficult, the pictures that fulfill my hopes for them are distressingly few. One in two? Not a chance. How about one in forty? *Setups*, that is, not negatives. At that rate, it's eighty negatives for every keeper, so a thousand exposures nets twelve-and-a-half keepers. That's about it; a year of work. And most of those pictures are of comparatively static subject matter. A great street photographer, working with subjects in flux, *might* get one "wonderful" picture from ten rolls of 35mm.

Never buy one of anything. Need a cable release? Buy a dozen. I buy the cheapest ones, six or eight inches long. They break or fall off and get lost. They can get caught in a tree fork and break inside the little socket they screw into. You (I) can't get the broken piece out, but Schneider has a little socket replacement part. It's cheap and held

on by two small screws. Get a few.

Thrift in paper and chemical use is serious business to a lot of photographers. Imagine ordering a custom print from me. I mix up a pint of developer in an 8x10 tray. Or I use yesterday's pint if it hasn't completely evaporated but has only turned slightly black. Then I tear off a corner of an 8x10 sheet of paper and run test exposures in 1/4" strips. The second sliver looks fine (six seconds). To save time, I open up a stop and make a print on grade 2 for three seconds. ("All my negatives are 'perfect.' They all print perfectly on grade 2 at six seconds.") I scrape it around in the developer tray, trying vainly to get the whole print submerged at once. Stop, fix, wash sort of, and dry. Don't bother to tone. I cash your check --the only thing I did well-- and send the print on its way, sandwiched between two thin sheets of tired corrugated. Absurd? Yes, but plenty of work is done to about that standard. I've seen the prints.

For up to four 8x10 finished prints, I never use less than a gallon of *fresh* solution in each 12x15 tray. If I contemplate more than four finished 8x10 prints, I use three gallons in 16x20 trays. My test strips are on full sheets of the size the print will be on and I always test strip on two grades. Often I will test strip on two brands of paper, two grades each.

I never start printing a negative using a box that has less than twenty sheets in it when contemplating my usual goal of four fine prints. If I get close to the final formula and have to open a new box, I'd have to start all over. I save the left over sheets of grade 2 for proofs, the 3's I throw out unless they are of an emulsion number that I have more of.

Let's assume that one test strip print has to be done over because the information appears at too short an exposure time or is in an area that isn't the one I want to know about. (3 sheets used). Now I make a pilot print on each grade so I can discard one and get on with it. (5 sheets). Next I'll make at least three full-sized bracket prints around my pilot exposure to see what other areas look like with more or less exposure. See "Printing" video. (8 sheets) Only now have I got the ammunition from which I can get the answers that will assure the best print I am capable of making. I find that bracket prints are essential. I can hold a twenty second print's corner over the corner of a sixteen second print to see what the sixteen second print will look like with a twenty second corner. Exactly. No guessing. Why guess if you can see it? Laziness, that's why! If too dark, I try the eighteen second corner. Too light? Fine. I write down on my recipe sheet, "19 sec." opposite the sketch showing the burn area and press on.

Then I print it with all the

refinements that were entered on the recipe sheet and give it a long look. Long is minutes, not seconds. If you are good you know that everything effects everything else and so there is absolutely no way that this first refined attempt, no matter how well planned and executed, will suffice. For example, now that you see the whole print with all the other changes, that 19 second corner now looks weak. You change your note to 20 seconds. A few more minor changes, a few more prints (12) and you are ready to make the four fine prints. You used at least twelve sheets and spent about two hours to get to this point. Most printers use much less paper and time than I do to make a print that satisfies them. They either know a lot more about it than I do or they are a lot easier to satisfy.

Remember a Newsletter in which I mentioned a failed attempt to increase the density of an underexposed negative by toning? I got some mail saying it would work, but only on the high values. If it only works on the high values, it doesn't increase density; it increases contrast which you can more easily do by changing paper grades. One letter stood out. It was from Joel Anderson of Bishop California. He had a way to boost the low values, which are the real problem with underexposed negatives. He invited me to send a negative for which he would make a "shadow mask." I

had a perfect candidate; actually two negatives taken seconds apart of the same scene in Scotland. One was perfectly exposed and developed and easily produces excellent prints. It would serve as a standard for comparison. The other was underexposed a stop-and-a-half but developed the same. I sent Joel the underexposed negative and received it back, taped to his masking film. I'll take the liberty to excerpt, paraphrase, etc his letter:

Dear Fred,

The shadow mask worked! (Yup.) The Proper Proofs show shadow values are markedly adjusted (denser) on the masked version. The shadow mask is a positive version of the original negative with only enough exposure to affect the shadow areas. "The highlights and upper end of the scale are relatively unaffected." He says he can adjust exposure and development of the masking film and/or use the mask for only a part of the printing exposure. My guess is that for this negative, in which the high values are also slightly strengthened, he may have given the mask a bit more than shadow-building exposure. It worked out fine. He mentioned that he thinks he could make a highlight mask also and will send information when he tries it. I think you would rarely need it because you can either dodge high negative densities or use a higher paper grade.

Equipment needed for Joel's

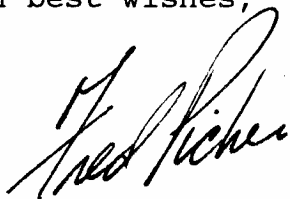
masking is a pin-registration enlarger, a matching film punch and some form of a pin registered contact exposing source. He used a point light source and a vacuum easel for exposing the mask in register with the negative. My negative was returned taped to the masking film with the advice, "if you remove the (masking) film, we'll lose registration."

Dear Joel,

Good job. The mask seems to make up for underexposure. I proofed it alongside the properly exposed negative and though much improved, it was still short of the density of the good negative. Proper Proof enclosed. I'm sure that had I sent you the good negative, you could have matched it.

To my mind, there is still, nothing as good as a "choice of negatives," one of which is right on the money. Conversely, there is nothing so infuriating-depressing as first blowing a fine image by a wrong decision or carelessness and then not having a backup. I've been haunted for years by a double exposure I executed --that's the right word-- in Iceland. I didn't back up everything then, as I've done since. I'll believe forever that those two ruined efforts would have surely been the best pictures I ever made...

With best wishes,

A handwritten signature in dark ink, appearing to read "Fred Richer". The signature is fluid and cursive, with a large, sweeping initial "F".

ZONE VI

N e w s | e t t e r

Newsletter 83, September, 1995

If something can happen, why
does it happen so seldom?

Salvador Dali

Why do excellent photographs happen so seldom? Seems to me that you have to be lucky enough to get *everything* working together to get a keeper. First, you surely need unusual and exciting subject matter not only for its intrinsic visual value, but also for the confidence and excitement it generates in the photographer. Then you need the quality and direction of light that will emphasize those aspects of the subject that you wish to portray. Then you need a certain amount of talent. Not always; occasionally an untalented photographer has, among thousands of also-rans, one or two outstanding pictures. He may not recognize them, however; I've seen proof sheets of many workshop people that contained more good stuff than they ever printed. What makes good pictures by casual workers ever happen, is luck. We *all* need luck. I've gone days without an exposure, then had days in which there were four or five keepers.

On my first day in Iceland I got off the plane early in the morning,

took a taxi directly to the auto rental place, and was quickly off into the countryside. Before dark I had four fine photographs. I was in Iceland to make a portfolio of sixteen; at this rate I'd be home before the weekend! But "this rate" was completely unrealistic and I not only spent a month there on that trip, I went back the following spring for another month. Three of those first-day four made it into the portfolio. Photography is sort of like baseball in which not more than two out of three *failures* to get a hit is good enough to get you into the hall of fame.

My hundred-and-fifty-year-old barn keeps spewing up treasures. There was a suitcase full of dreadfully sad letters, back and forth, from people who lived in my house and a son who was a soldier in the first world war. What a horrible conflict that was. He lost all his troop and finally was himself rendered an amputee. I found a very valuable glass vase there and an amazing diary-notebook of a young woman. It began when, as a child, she could barely write and ended with a beautifully written description of the birth of her third child.

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I recently found a box of letters I had stored there years ago. Among them was a big stack from Ansel and I spent a lovely evening reminiscing. What a unique person he was. He approached everything with an open mind. He was a doer. If he didn't know the answer, he didn't ask someone else for an opinion. (Who wants an opinion? You've already got that!) He went to work and found out *what happened*.

In the often backbiting world of photography he was purely generous. He never hesitated to compliment a good photograph, never felt that the quality of anyone else's work, writing, workshops or methods diminished his in the slightest.

To share a bit of the authentic flavor and the approach to life of one of our greatest photographers, wits, and ecologists, I think he wouldn't mind if I opened a few of his thoughts (sometimes obscure) to you; he was also among the most generous people I've known. And the most productive-industrious. I've left in all the punctuations, etc. They are part of the flavor.

Oct.2, 1976

Dear Fred,

I just read a glowing report on your new book:THE FINE PRINT by Farber in Petersen's PHOTOGRAPHIC Magazine. I congratulate you on your remarkable output and all you have done for good photography! (Ansel was the

unchallenged master in the use of the
!)

My new publishers, NEW YORK GRAPHIC SOCIETY, are going to do fully revised editions of my books (all of them) and I am deep in the preparation thereof. There are many books that deal with the Zone System, etc. It should be a straightforward "system" but the complexities often brought into it are beyond me.

My SOUTHWEST book is to be published on Oct. 8th. I am going to the opening of my exhibit at the University of Arizona on the 8th. My exhibit at the Victoria and Albert Museum in London was very well done and attracted a lot of attention. (Personal stuff here.) Hope all goes well with you. Best wishes from all. As ever, Ansel.

Photo copy of a letter 3/13/75 to Paul Farber, editor of Petersen's. At the top of the photo copy he wrote, "Dear Fred: Cheers- You are doing a great job. Hope we can see you soon. This letter represents the usual gripe at those who miss the conceptual elements of the Zone System. But they mean well!! (plural !)

All best, Ansel

Dear Paul Farber.

I was much pleased to find your excellent boost for Fred Picker and his books, etc. He is doing a fine job and deserves more attention than he is getting!

I was distressed over the comments

on the Zone System simply because they repeat a misunderstanding. I am sure Picker would agree with me on this. As the originator of the Zone System I must take blame for a lot of confusion; I have written perhaps too "carefully" for a general-reader capability and have also made errors of statement and definition (especially in earlier days).

The prime function of the Zone System is to encourage people to "see" in terms of the final print. The methods used to achieve this pre-visualization are entirely secondary. The object is to get a negative that contains the required... (Next nine words are blurred beyond recognition on the old copy paper. I'll guess they were something like, "densities to permit the creation of a print expressive of the photographer's response to the subject.") Well...that's what *I* would have said!!!

Films and papers change over the years. Some cameras have few adjustments and some -such as the SX-70- a relatively short-scale film, but with a good Light-Dark control. Obviously, whatever process is used defines not only the technique but the "seeing" as well. A musician composes for certain instruments; I could not imagine a Concerto Grosso for the flute!

Without visualization, The Zone System is just a lot of chatter without meaning. Many of us find it important to "tune" our

instruments-and that is just what the recommended tests are for. Minor White takes the the Zone System into the realm of the quasi-mystical. Others use it in a very approximate way. *It is simply sensitometry-sensitometry simplified*, if you will. (Italics are mine.) But almost everyone overlooks the basic fact that the Zone System enables individual concepts (as visualized) to be realized (with due consideration for the limitations of the mediums used).

Cordially, Ansel

9/19/93

Dear Fred,

I'm glad you like The Print (he had sent a revised edition of his printing book.) I am greatly disappointed in the printing of the first run, but the subsequent printings will be back to normal.

The new meter (a project that never got past the wish phase) interests me and I am sure it will solve many of the problems we have had to intuitively overcome by using standard meters. I have found that the color sensitivity variations depend on the degree of color saturation of the subject. Normally this difference has not been excessive, but the difference in Kelvin (Note: that's the color temperature of the ambient light and has nothing to do with the subject's color) may account for many of the problems we have experienced.

Linearity has always been a problem. Indeed, when you take all the inherent problems of the eye, light, subject, meter, shutter and film, it is a miracle we are as consistent as we are.

The workshop world is changing but fortunately some like yours have been successful. There are difficulties and your analysis is right on (no idea what I said!)

Rather than be alarmed by the advent of electronic photography, I am encouraged as in the end I think it will vastly increase our possible controls.

As soon as I get back on my feet I want to try your VC and Brilliant papers. I am not sure that the VC has the edge over a paper such as Brilliant. And one more comment: your print record is fine. (Referring to my printing information form with the boxes.) More soon, warm regards,

3/4/77

Dear Fred,

(Upon my appointment to the board of the Friends of Photography) I think you will be pleased at then development of the F.O.P. even if you do not like all the photography of our time.

Look-I work in my own way, following my basic concepts of photography. Bach made his music and Mozart made his. Both are very different. And Stravinsky and Bartok are very different from both of them.

But it is all great music -in one way or another. It would be foolish and immoral for me to jump on the bandwagon and make pictures like Arbus or Heinecken. It is just not my style. But that does not prevent me from appreciating them for what they are -explorers and creative artists of our time.

I agree there is some "abuse" of the camera. However, you can't hurt the camera; you can only hurt yourself and, perhaps, a few other people. You can't hurt photography, because -as any art- it will always find its own level in time.

Agreed: I want to share experiences which I think are important and which I think are beautiful. You hit the nail on the head when you related work of my type to "great music of another time." I am interested in "another time" which includes the future time (and certainly the present). But as I am 75 years old, I cannot put myself in a youth's shoes and climb high mountains and new concepts! They will accomplish their life's work in their own way just as I accomplished mine in my way. People are trying to express themselves through photography - not imitate what has been done. When students try to imitate Weston and Adams, et al they are just wasting time. It has always been the NEW thing that counted in the creative fields; not imitation!

Performing the music of Bach is

re-creation. To write Bach in these times would be imitative - not creative. I think there are too many photographers today working in an euphoria of imitation (or self-imitation), and not climbing new mountains. I have not made pictures for quite a time; I have been involved in printing what I have done (I had a distressing sense of incompleteness, and whenever I tried to photograph I was just pot-boiling). I have an exception in a few images I secured in England and Scotland last summer-when I am free of the pressures of printing long-standing orders I want to go back there and-who knows?- I might have a whole new creative stage. But I am not going to force myself into a new approach just because its new!

You are right - much art, including photography, of our time seems designed to shock, to evade and sensationalize. Some of it does (and with sad ulterior motives) But much of it seems that way because it is new and unfamiliar. In order to live the artist must "exploit" his work in one way or another. The history of art clearly shows that the great artists were not necessarily great people! Some of the great artists I know are utterly selfish and self-centered, immoral, and unethical. Some are great people in all directions (not many!!) Anyone who consciously degrades his medium is simply no artist; but sometimes our work get misused or misinterpreted.

I was just writing a little piece that might fit into the introduction for a new edition of Book I. In it I mentioned that most spectators look at photographs in terms of the subject; your Iceberg or Easter Island image, my Winter Sunrise or Moonrise, Hernandez. They are not aware of the "other dimension" that we add to it by our "departures from reality". The concept of the "fine print" has no meaning for them. The "Academic" approach was to glorify the subject (refer to French, English and early American painters) Around the turn of the Century some artists expressed their resentment of the "Academy" and turned to "abstractions" as a way of expressing their personal concepts. "Dada" was a movement of ridicule which-to the surprise of the artists-people took seriously!! There seems to be a power of decision that is beyond the individual. We live in a continuing Renaissance (sp??) The worst thing that could happen to the world at this time would be to have its ideas and arts to become sterile.

If I were starting out as a young man today I am sure I would be deeply interested in creative video; the electronic image is the image of the future.

I have great affection and respect for you, Ansel

What I found wonderful about Ansel was his imagination, enthusiasm, curiosity, and knowledge. What I found

even more wonderful was his extraordinary kindness, generosity, and humility, and patience. I remember one evening at his home. During the meal the phone rang and Ansel spent a good half hour, while his dinner congealed, explaining the Zone System to someone he had never met. People would just stop by and he would come out of his darkroom and entertain them for an hour. His humor and buoyancy was infectious. One evening we went out for dinner in the worst place you could imagine. It was so bad he wanted me to see it. The walls were covered with neon Elvises and tigers, etc. on black velvet. There was black light and everything glowed. Including the food. He advised us to anesthetize ourselves with his beloved (and equally distressing) Paul Masson Emerald Dry wine. After a bit, you didn't know what was worse; the art, the food, or the wine.

It was more than twenty years ago that I started Zone VI from a garage in White Plains, New York. At the time I was working as a free lance industrial and architectural photographer. "Free lance" is classy for spending a lot of time in architects offices, showing a lot of work to prospects, haggling over fees and subsequently attempting to collect those finally agreed on. I also drove a lot of miles and made a little money. The main problem, however, was that photographing and printing six

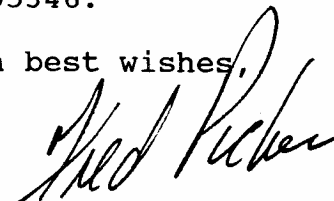
days a week to keep the wolf away left as little energy as it did time for personal work. Somehow I managed to sandwich in the books *Rapa Nui* and *Zone VI Workshop* during that time.

I taught a few workshops and designed a few items, but the big boost that got *Zone VI* started was the serialization of *The Zone VI Workshop* in Petersen's magazine. Hundreds of people wrote asking about workshops, other books, etc. I had a mailing list so began to develop a few items and started this Newsletter. Like Topsy, it grew. Who ever thought in those days we would ever manufacture things like enlargers and cameras. I had only hoped for enough income, aided by a little commercial work, to permit me to move to Vermont, live cheap, and photograph.

But it became a bigger, more complicated business than I had wanted. So five years ago I sold it but continued to stay on as the pressure of ownership had lessened.

But now I feel that it's again time to reassess; I resigned August 25th to spend even more time on things I enjoy. This then will be the last *Zone VI Newsletter* I will write. I truly appreciate your past support and hope that you would like to stay in touch. Feel free to write me at RR 2, Box 1170, Putney, VT 05346.

With best wishes,


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